

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 February 2003 (20.02.2003)

PCT

(10) International Publication Number
WO 03/014159 A1

(51) International Patent Classification⁷: **C07K 14/705**,
14/71, G01N 23/20, 33/566, G06F 19/00, G06N 5/00,
G06F 17/40 // 159:00

(21) International Application Number: PCT/AU02/01042

(22) International Filing Date: 5 August 2002 (05.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PR 6827 3 August 2001 (03.08.2001) AU
PR 6828 3 August 2001 (03.08.2001) AU
60/336,560 1 November 2001 (01.11.2001) US
60/335,393 1 November 2001 (01.11.2001) US
PS 2731 31 May 2002 (31.05.2002) AU
60/388,171 11 June 2002 (11.06.2002) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF SCREENING BASED ON THE EGF RECEPTOR CRYSTAL STRUCTURE

(57) Abstract: This invention relates to the structure of members of the epidermal growth factor (EGF) receptor family and to receptor/ligand interactions. In particular, it relates to the field of using the EGF receptor family structure to select and screen for compounds that inhibit the formation of active receptor dimers.

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Methods of screening based on the EGF receptor crystal structure

Field of the Invention

This invention relates to the structure of members of the epidermal growth factor (EGF) receptor family and to receptor/ligand interactions. In particular, it relates to the field of using the EGF receptor family structure to select and screen for compounds that inhibit the formation of active receptor dimers.

Background of the Invention

Epidermal growth factor is a small polypeptide growth factor that stimulates marked proliferation of epithelial tissues and is a member of a larger family of structurally related growth factors such as transforming growth factor α (TGF α), amphiregulin, betacellulin, heparin-binding EGF and some viral gene products. Abnormal EGF family signalling is a characteristic of certain cancers (Yarden and Sliwkowski, 2001, Nature Reviews Mol Cell Biol. 2, 127-37; Soler and Carpenter, 1994 In Nicola, N. (ed) "Guidebook to Cytokines and their Receptors", Oxford Univ. Press, Oxford, pp194-197; Walker and Burgess, 1994, In Nicola, N. (ed) "Guidebook to Cytokines and their Receptors", Oxford Univ. Press, Oxford, pp198-201).

The epidermal growth factor receptor (EGFR) is the cell membrane receptor for EGF (Ullrich and Schlessinger, 1990, Cell 61, 203-212). The EGFR also binds other ligands that contain amino acid sequences classified as the EGF-like motif. Other known ligands of the EGFR are amphiregulin (Shoyab et al., 1988, Proc Natl Acad Sci U S A. 85: 6528-6532. ; Shoyab et al., 1989, Science. 243: 1074-1076.), heparin-binding epidermal growth factor receptor (Higashiyama et al., 1991, Science. 251: 936-939.), betacellulin (Sasada et al., 1993, Biochem Biophys Res Commun. 190: 1173-1179; Shing et al., 1993, Science. 259: 1604-1607.), epiregulin (Toyoda et al., 1995, J Biol Chem. 270: 7495-7500; Toyoda et al., 1997, Biochem J. 326: 69-75.) and epigen (Strachan et al., 2001, J Biol Chem. 276: 18265-18271.). Among these ligands, the three-dimensional structures of EGF and TGF α have been determined by NMR (Montelione et al., 1986 PNAS 83(22): 8594-8; Campbell et al., 1989, Prog. Growth Factor Res. 1, 13-22). Upon binding of the ligand to the extracellular domain, the EGFR undergoes dimerization, which eventually leads to the activation of its cytoplasmic protein tyrosine kinase (Ullrich and

Schlessinger, 1990, Cell 61, 203-212). The EGFR is also known as the ErbB-1 receptor and belongs to the type I family of receptor tyrosine kinases (Ullrich, and Schlessinger, 1990, Cell 61, 203-212). This group also includes the ErbB-2, ErbB-3 and ErbB-4 receptors. No high affinity ligand has yet been found for ErbB-2 (Olayioye et al., 2000, EMBO J. 19: 3159-3167.). The neuregulins are alternatively spliced proteins from one of at least four genes which contain an EGF-motif and bind to ErbB-3 and/or ErbB-4 (Olayioye et al., 2000, EMBO J. 19: 3159-3167). One of the neuregulins known as heregulin-1 α or NDF was found to fold into an EGF-like fold by NMR (Nagata et al., 1994, EMBO J. 13, 3517-3523 and Jacobson et al., 1996, Biochemistry 36, 3402-3417). The EGFR ligands epiregulin, betacellulin and heparin-binding epidermal growth factor receptor also bind to ErbB-4 (Olayioye et al., 2000, EMBO J. 19: 3159-3167.)

The type II family of receptor tyrosine kinases consists of the insulin receptor (INSR), the insulin-like growth factor I receptor (IGF-1), and the insulin receptor-related receptor (Ullrich and Schlessinger, 1990, Cell 61, 203-212). Although the type II receptors consist of four chains ($\alpha_2\beta_2$), both the extracellular portions of the receptors from the two families, as well as the tyrosine kinase portions, share significant sequence homology, suggesting a common evolutionary origin (Ullrich and Schlessinger, 1990, Cell 61, 203-212, and Bajaj et al., 1987, Biochim. Biophys. Acta 916, 220-226).

The 621 amino acid residues of the extracellular domain of the human EGFR (sEGFR) can be subdivided into four domains as follows: L1, S1, L2 and S2, where L and S stand for "large" and "small" domains, respectively (Bajaj et al., 1987, Biochim. Biophys. Acta 916, 220-226, see Fig. 2). The L1 and L2 domains are homologous, as are the S1 and S2 domains.

Ligand-induced dimerization was first reported for the EGF receptor (Schlessinger, 1980, Trends Biochem Sci 13, 443-447) and now is widely accepted as a general mechanism for the transmission of growth stimulatory signals across the cell membrane. Although many biochemical experiments have been performed to reveal the molecular mechanism of receptor dimerization (Lemmon et al., 1997, EMBO J. 16, 281-294 and Tzabar et al., 1997, EMBO J. 16, 4938-4950 and Lax et al., 1991, J. Biol. Chem. 266, 13828-13833), the molecular mechanism by which monomeric ligands induce dimerization is still unknown for members of the EGFR family. Single particle averaging of electron microscopic images suggests that the overall shape of

the sEGFR is four-lobed and doughnut-like (Lax et al., 1991, J. Biol. Chem. 266, 13828-13833). Small angle x-ray scattering also indicates that the sEGFR can be approximated by a flattened sphere with long diameters of 110 Å and a short diameter of 20 Å (Lemmon et al., 1997, EMBO J. 16, 281-294). The
5 crystallization of sEGFR in complex with EGF has been published (Günther et al., 1990, J. Biol. Chem. 265, 22082-22085; Degenhardt et al., 1998, Acta Crystallogr. D Biol. Crystallogr. 54:999-1001), but the structure has not yet been reported, despite a decade of effort by many groups.

One EGF receptor ligand, TGF- α has been observed to be overproduced
10 in keratinocyte cells which are subject to psoriasis (Turbitt et al., 1990, J. Invest. Dermatol. 95(2), 229-232; Higashimiyama et al., 1991, J. Dermatol., 18(2), 117-119; Elder et al, 1990, 94(1), 19-25). The overproduction of at least one other EGF receptor ligand, amphiregulin, has also been implicated in psoriasis. (Piepkorn, 1996, Am. J. Dermatopath., 18(2), 165-171). Molecules
15 that inhibit the EGF receptor have been shown to inhibit the proliferation of both normal keratinocytes (Dvir et al, 1991, J. Cell Biol., 113(4), 857-865) and psoriatic keratinocytes. (Ben-Bassat et al., 1995, Exp. Dermatol., 4(2), 82-88). These findings indicate that EGF receptor antagonists may be useful in the treatment of psoriasis.

20 Many cancer cells express constitutively active EGFR (Sandgreen et al., 1990, Cell, 61:1121-135; Karnes et al., 1992, Gastroenterology, 102:474-485) or other EGFR family members (Hynes, 1993, Semin. Cancer Biol. 4:19-26). Elevated levels of activated EGFR occur in bladder, breast, lung and brain tumours (Harris, et al., 1989, In Furth & Greaves (eds) The Molecular
25 Diagnostics of human cancer. Cold Spring Harbor Lab. Press, CSH, NY, pp353-357). Antibodies to EGFR can inhibit ligand activation of EGFR (Sato et al., 1983 Mol. Biol. Med. 1:511-529) and the growth of many epithelial cell lines (Aboud-Pirak et al., 1988, J. Natl Cancer Inst. 85:1327-1331). Patients receiving repeated doses of a humanised chimeric anti-EGFR monoclonal
30 antibody (Mab) showed signs of disease stabilization. The large doses required and the cost of production of humanised Mab is likely to limit the application of this type of therapy. These findings indicate that the development of EGF receptor antagonists will be attractive anticancer agents.

Summary of the Invention

The present inventors have now obtained three-dimensional structural information concerning a complex of human epidermal growth factor receptor (EGFR) residues 1-501 with human TGF α . In the complex each ligand only
5 contacts one receptor and each receptor fragment contacts only one ligand. The receptor dimer seen in the crystals is a back-to-back dimer (S1 to S1). The co-ordinates for the EGF receptor in back-to-back dimer configuration are shown in Appendix I and Appendix II. Appendix II is a refined version of the co-ordinates presented in Appendix I.

10 The information presented in this application can be used to predict the structure of related members of the EGF receptor family and the nature of the dimers formed by these receptors. This information can be used to develop compounds which interact with members of the EGF receptor family for use in therapeutic applications.

15 Accordingly, in a first aspect the present invention provides a method of selecting or designing a compound that interacts with a receptor of the EGF receptor family and modulates an activity associated with the receptor, the method comprising

(a) assessing the stereochemical complementarity between the
20 compound and a topographic region of the receptor, wherein the receptor comprises:

- (i) amino acids 1-501 of the EGF receptor positioned at atomic coordinates as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the
25 backbone atoms of said amino acids of not more than 1.5Å;
- (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations; or
- (iii) amino acids present in the amino acid sequence of a receptor of
30 the EGF receptor family, which form an equivalent three-dimensional structure to that of amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino
35 acids of not more than 1.5Å, or one or more subsets thereof,

- (b) obtaining a compound which possesses stereochemical complementarity to a topographic region of the receptor; and
- (c) testing the compound for its ability to modulate an activity associated with the receptor.

5 In a preferred embodiment of the first aspect, the structural coordinates have a root mean square deviation from the backbone atoms of said amino acids of not more than 1.0Å and more preferably not more than 0.7Å.

In one embodiment of the first aspect, the subset of amino acids is selected from the group consisting of the subset of amino acids representing
10 the L1 domain, the subset of amino acids representing the L2 domain and the subset of amino acids representing the S1 domain.

In another embodiment, the subset of amino acids relates to a semi-rigid domain within the EGF receptor, such as a domain based on or about residues 1-84; 191-237; 238-271; 271-284; 285-305 or 313-501; or an equivalent
15 domain of another member of the EGF receptor family.

By "stereochemical complementarity" we mean that the compound or a portion thereof makes a sufficient number of energetically favourable contacts with the receptor as to have a net reduction of free energy on binding to the receptor.

20 From the information provided in Appendix I and Appendix II it can be seen that TGF α interacts with residues 1-501 of EGFR such that residues 3-5, 22, 24, 26, 27, 29-34, 36, 38-41, 43, 44, 47 and 49 of TGF α interact with residues 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128 of L1 of EGFR and residues 8, 9, 11-15, 17, 18, 38, 39, 42 and 44-50
25 of TGF α interact with residues 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467 of L2 of EGFR.

Two residues or groups of residues are taken to "interact" when the solvent accessible surface calculated for one set of residues is reduced if it is recalculated in the presence of the other set of residues. The solvent
30 accessible surface is defined by Lee. B and Richards, F. M. (1971) J. Mol. Biol. 55:379-400 using a probe radius of 1.4 Å.

The ligand binding surfaces of EGFR are therefore defined by residues 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128 of L1 and residues 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412,
35 415, 417, 418, 438, 440, 465 and 467 of L2. It is believed that corresponding

regions of other members of the EGF receptor family will also be involved in the binding of their natural ligand.

Accordingly, in one embodiment of the first aspect the compound is selected or designed to interact with a member of the EGF receptor family in a manner such as to interfere with the binding of natural ligand to:-

(i) one or more of the residues of EGFR selected from the group consisting of 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127, 128, 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467 and combinations thereof; or

(ii) the corresponding region of other members of the EGF receptor family.

The compound may interfere with ligand binding to one or more of the specified residues in a number of ways. For example the compound may bind or interact with the receptor at or near one or more of the specified residues or corresponding regions and by steric overlap and/or electrostatic repulsion prevent natural ligand binding. Alternatively the compound may bind to the receptor so as to interfere allosterically with natural ligand binding. For example the compound may bind to the L1 and L2 domains in manner such as to decrease the "gap" between the L1 and L2 domains thereby preventing access of the ligand to one or more of the specified residues.

Alternatively the compound may bind to the receptor so as to interfere allosterically with natural ligand binding. For example:-

(i) The compound may bind to the L1 and L2 domains in manner such as to decrease the "gap" between the L1 and L2 domains thereby preventing access of the ligand to one or more of the specified residues.

(ii) The compound may bind at or near the interface between S1 and either L1 or L2 domains to thereby perturb the domain associations as shown in Appendix I and II for the signalling competent ligand-receptor complex.

(iii) The compound may bind at a site remote from the ligand-binding site but disturb the receptor structure so as to reduce the affinity of ligand binding.

Sites for allosteric interference lie within 5 Å of atomic positions listed in Appendices III and IV.

It is presently preferred, however, that the compound binds or interacts with the receptor at or near one or more of the specified residues or within the corresponding region.

Accordingly in one embodiment of the first aspect, the receptor is EGFR and topographic region of EGFR to which the compound has stereochemical complementarity is the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or
 5 the ligand binding surface defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.

The phrase "EGF receptor family" includes, but is not limited to, the EGF receptor, ErbB2, ErbB3 and ErbB4. In general, EGF receptor family molecules show similar domain arrangements and share significant sequence
 10 identity, preferably at least 40% identity.

The known natural ligands for these receptors are as follows:

EGFR	EGF, TGF α , amphiregulin, betacellulin, epiregulin and heparin-binding EGF;
ErbB3	neuregulins 1 and 2;
15 ErbB4	neuregulins 1-4, betacellulin, epiregulin and heparin-binding EGF;
ErbB2	ErbB2 alone has not been reported to bind any ligand with high affinity but is preferred heterodimerisation partner for the other three EGF receptor family members, enhancing 20 their affinities for their respective ligands and amplifying their signals.

The domain structure of the extracellular regions of the EGFR, ErbB-2, ErbB-3 and ErbB-4 are the same. The percentage identities of the sequences corresponding to the first 501 residues of the EGFR are 42-47 % except for that
 25 for ErbB-3 and ErbB-4 which is 60 %. Previously, it has been possible to construct models of ErbB-2, ErbB-3 and ErbB-4 based on the structure of the first three domains of the insulin-like growth factor receptor (Garrett et al., (1998) *Nature*. 394: 395-399.) as has been performed for the EGFR (Jorissen et al., (2000) *Protein Sci.* 9: 310-324.) where the sequence identity is
 30 approximately 25%. At the higher sequence identity between EGFR and the other EGFR family members, models can be constructed which are expected to have a smaller degree of error (Tramontano A. (1998) *Methods*. 14: 293-300).

A sequence alignment between the four EGFR family members is shown in Figure 1. Using the information provided in Appendix I Appendix II and the
 35 sequence alignment models of other members of the EGF receptor family can be obtained using the methods described in the reference referred to above.

The structure of the TGF α - EGFR complex also allows construction of the binding of EGFR family ligands to be modelled. Several interactions between TGF α and the sEGFR501 suggest that the observed mode of binding is the same for the EGFR family members and their ligands. There are two
5 mainchain-to-mainchain hydrogen bonds between the EGFR L1 domain and TGF α :EGFR Gln 16.N - TGF α Cys 32.O and Gln 16.O - TGF α Cys 34.N. The sidechain of conserved TGF α residue Arg 42 forms a salt bridge with the sidechain of conserved EGFR residue Asp 355.

The sequence alignment of ligands for EGF receptor family is set out in
10 Figure 2.

The approximate ligand binding regions of ErbB-2, ErbB-3 and ErbB-4 can be deduced using the alignment of their sequences to that of the EGFR (Figure 1) and the EGFR sequences listed earlier (residues 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127, 128, 325, 346, 348-350, 353-
15 358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467). For ErbB-2 (whose N-terminal sequence is taken to be STQV), these residues are 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135, 136, 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475. For ErbB-3 (whose N-terminal sequence is taken to be SEVG),
20 these residues are 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131, 132, 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466. For ErbB-4 (whose N-terminal sequence is taken to be QPSD), these residues are 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, 326, 347, 349-351, 354-359, 383, 385,
25 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468. (Note that the N-termini correspond to the putative start of the mature proteins according to their entries in the SWISSPROT database at the time of writing.) There are expected to be minor differences in the amino acids of the EGFR family member (including EGFR) which make up the ligand binding site depending on
30 the identity of the ligand and receptor. For example, the EGFR residue Gly 442 is not listed as part of the binding site for bound TGF α but has been implicated in the binding of EGF (Elleman et al., (2001) *Biochemistry*. 40: 8930-8939.). A comparative model of the EGF - EGFR 1-501 complex shows that part of the sidechain of EGF residue Arg 45 is close to EGFR Gly 442. (The small size of the TGF α Ala 46 sidechain prevents this contact in the TGF α - bound complex.)
35 Other variations in the definition of the ligand binding site for the modelled

EGFR family member - ligand complex may arise from the variation in the size of the so-called B-loop of some of the EGFR family ligands (Groenen et al., (1994) *Growth Factors*.11: 235-257.).

In a preferred embodiment of the first aspect of the present invention, the method comprises selecting or designing a compound which has portions that match residues positioned on the ligand binding surface of EGFR defined by amino acids 11-18, 20, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface of EGFR defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438 and 465, or the corresponding regions of other members of the EGF receptor family.

By "match" we mean that the identified portions interact with the surface residues, for example, via hydrogen bonding or by enthalpy-reducing Van der Waals and Coulomb interactions which promote desolvation of the biologically active compound with the receptor, in such a way that retention of the compound by the receptor is favoured energetically.

In a further preferred embodiment of the first aspect, the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than $10^{-6}M$, more preferably the K_d value is less than $10^{-8}M$ and more preferably less than $10^{-9}M$.

In preferred embodiments of the first aspect of the present invention, the compound is selected or modified from a known compound identified from a data base.

A second aspect of the present invention provides a method of selecting or designing a compound that inhibits the formation of active dimers of receptors of the EGF receptor family, the method comprising:

(a) assessing the stereochemical complementarity between the compound and a topographic region of the receptor, wherein the receptor comprises:

- (i) amino acids 1-501 of the EGF receptor positioned at atomic coordinates as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å;
- (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations; or

- (iii) amino acids present in the amino acid sequence of a receptor of the EGF receptor family, which form an equivalent three-dimensional structure to that of amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets thereof,
- (b) obtaining a compound which possesses stereochemical complementarity to a topographic region of the receptor; and
- (c) testing the compound for its ability to inhibit the formation of active dimers of the receptors.

From the information provided in Appendix I and Appendix II it can also be seen that in the EGF dimer residues 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 of the first receptor of the dimer interact with residues 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287 of the second receptor of the dimer. It is believed that corresponding regions of other members of the EGF receptor family will also be involved in the formation of active dimers.

Accordingly, in a further preferred form the compound is selected or designed to interact with a member of the EGF receptor family in a manner such as to interfere with the formation of active dimers by inhibiting interaction of;

(i) residues 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 of EGFR or the corresponding region of a member of the EGF receptor family;

with

(ii) residues 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287 of EGFR or the corresponding region of a member of the EGF receptor family.

The compound may interfere with dimerization in a number of ways. For example the compound may bind to the EGFR at or near one or more of the specified residues and by steric overlap an/or electrostatic repulsion prevent dimerization. Alternatively the compound may bind to EGFR so as to interfere allosterically with dimer formation.

Accordingly in one preferred embodiment of the second aspect, the receptor is EGFR and the topographic region of the EGFR to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287 .

The regions of ErbB-2, ErbB-3 and ErbB-4 involved in dimerization can also be deduced using the alignment of their sequences to that of the EGFR (Figure 1) and the EGFR sequences listed earlier (residues 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288, 318). For ErbB-2 (whose N-terminal sequence is taken to be STQV), these residues are 36, 84, 201- 203, 211, 212, 236, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295, 326. For ErbB-3 (whose N-terminal sequence is taken to be SEVG), these residues are 41, 89, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-279, 281-287, 317. For ErbB-4 (whose N-terminal sequence is taken to be QPSD), these residues are 40, 88, 195-197, 206, 207, 231, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289, 319. (Note that the N-termini correspond to the putative start of the mature proteins according to their entries in the SWISSPROT database at the time of writing.)

The mode of dimerization seen in the crystal structure is consistent with homodimers and heterodimers of all four EGFR family members. Several residues which appear to be important for maintaining the dimer interface in EGFR are conserved in the EGFR family. The conserved Asn 247 makes sidechain-to-mainchain hydrogen bonds which help to maintain the structure of the loop which interacts with the other EGFR molecule in the dimer. Residues Tyr 251 and Phe 263 are involved in packing interactions across the interface; these residues are either tyrosine or phenylalanine in ErbB-2, ErbB-3 and ErbB-4. The side chain of the conserved residue Tyr 246 makes hydrophobic packing and hydrogen bonding interactions with the other EGFR in the dimer.

As used herein the term "dimer" is intended to cover both homodimers and heterodimers.

By "active dimer" we mean a dimeric form which causes signalling.

In a further embodiment of the second aspect of the present invention, the method comprises selecting or designing a compound which has portions

that match residues positioned on the dimer interface of EGFR defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 or the corresponding regions of other members of the EGF receptor family and/or the dimer interface defined by amino acids
5 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287 or the corresponding regions of other members of the EGF receptor family.

In a preferred embodiment the compound is designed or selected to comprise a first domain which interacts with the dimer interface of a first EGF
10 receptor family member and a second domain which interacts with the dimer interface of a second EGF receptor family member. As will be recognised such a compound will cross-link receptor and prevent formation of active dimers.

In a further preferred embodiment of the second aspect of the present invention, the stereochemical complementarity is such that the compound has
15 a K_d for the receptor site of less than 10^{-6} M. More preferably, the K_d value is less than 10^{-8} M and more preferably less than 10^{-9} M.

In preferred embodiments of the second aspect of the present invention, the compound is selected or modified from a known compound identified from a data base.

20 The information provided in Appendix I and Appendix II also reveals the portions of $TGF\alpha$ which are involved in receptor binding. With this information $TGF\alpha$ variants may be designed in which specific residues are modified or altered such that the variant retains is able to bind to one ligand binding surface but not the other. It would be expected that such a variant would compete with
25 the natural ligand for binding to the receptor but that binding of the variant to the receptor would not lead to signalling. Such a variant would therefore be an antagonist. In a similar manner variants which would act as agonists could be designed. In this case the modifications or alterations would be selected such as to increase the strength of interaction between the receptor and the variant
30 so as to lead to increased signalling.

In a similar manner to that described for $TGF\alpha$, variants of other ligands of the EGF receptor family may also be designed.

Accordingly in a third aspect the present invention consists in a $TGF\alpha$ variant in which the sequence of $TGF\alpha$ is modified such that the ability to
35 interact with L1 of EGFR is retained or increased and the ability to interact with L2 of EGFR is removed or decreased, or *vice versa*.

In a fourth aspect the present invention consists in a TGF α variant in which the sequence of TGF α is modified such that the ability to interact with L1 of EGFR is retained or increased and the ability to interact with L2 of EGFR is retained or increased, with the proviso that the binding to at least one of L1 or
5 L2 is increased.

In a preferred embodiment of these aspects of the present invention the TGF α variant is modified at one more of the positions selected from the group consisting of 3-5, 8, 9, 11-15, 17, 18, 22, 24, 26, 27, 29-34, 36 and 38-50.

In a fifth aspect the present invention consists in an EGF variant in which
10 the sequence of EGF is modified such that the ability to interact with L1 of EGFR is retained or increased and the ability to interact with L2 of EGFR is removed or decreased, or *vice versa*.

In a sixth aspect the present invention consists in an EGF variant in which the sequence of EGF is modified such that the ability to interact with L1
15 of EGFR is retained or increased and the ability to interact with L2 of EGFR is retained or increased, with the proviso that the binding to at least one of L1 or L2 is increased.

By "variant" we mean that the natural sequence of EGF or TGF α has been modified by one or more point mutations, insertions of amino acids,
20 deletions of amino acids or replacement of amino acids, in particular using non-natural amino acids such as D-isomers of natural amino acids, 2,4-diaminobutyric acid, α -amino isobutyric acid, 4-aminobutyric acid, 2-aminobutyric acid, 6-amino hexanoic acid, 2-amino isobutyric acid, 3-amino propionic acid, ornithine, norleucine, norvaline, hydroxyproline, sarcosine,
25 citrulline, homocitrulline, cysteic acid, t-butylglycine, t-butylalanine, phenylglycine, cyclohexylalanine, β -alanine, fluoro-amino acids, designer amino acids such as β -methyl amino acids, C α -methyl amino acids, N α -methyl amino acids, β -naphthalimo amino acids and amino acid analogues in general.

The information provided in Appendix I and Appendix II also reveals the
30 portions of EGFR which are involved in dimer formation and the portions EGFR involved in ligand binding. With this information EGFR variants or fragments may be designed in which specific residues are modified or altered such that the variant or fragment retains the ability to form dimers with the EGFR and or bind ligand. It would be expected that such variant or fragments would
35 compete with the natural receptors for dimerization or ligand binding but that

dimerization of the variant or fragment with the receptor would not lead to signalling.

Accordingly in a seventh aspect the present invention consists in a polypeptide, the polypeptide comprising amino acids which interact with amino
5 acids 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288, 318 of EGFR or the corresponding region of a member of the EGF receptor family, or which are involved in binding of natural ligand of the EGF receptor family.

In a preferred embodiment the polypeptide is based on the native
10 sequence of EGFR but includes modifications such that the interaction between the polypeptide and the native receptor is preferred over the interaction between native receptors.

In a further preferred embodiment the polypeptide is based on the native
15 sequence of EGFR but includes modifications such that the interaction between the polypeptide and the natural ligand is preferred over the interaction between the natural ligand and native receptor.

As will be understood by those skilled in this field knowledge of the structure of a protein complex is of assistance in the development of mutants of one of the proteins with enhanced affinity for its protein partner. Structural
20 information can be used to select residues on one or more of the protein interfaces in the complex for alteration by methods such as site-directed mutagenesis or phage display. For example, amino acid positions in growth hormone which were allowed to vary were chosen in part from the crystal structure of the complex of growth hormone bound to two molecules of the
25 human growth hormone extracellular region (Lowman and Wells (1993) *J Mol Biol.* 234: 564-578.). Using a model of the granulocyte colony-stimulating factor (G-CSF) receptor ligand binding domain, residues of the receptor were chosen for mutagenesis by analogy with the structure of human growth hormone bound to its receptors (Layton et al., (1997) *J Biol Chem.* 272: 29735-
30 29741.). Some of the mutant G-CSF receptors were found to bind G-CSF with slightly enhanced affinity (Layton et al., (1997) *J Biol Chem.* 272: 29735-29741.). The structure of the complex could also be used to design mutations which would potentially increase the binding affinity, for example by increasing the amount of hydrogen bonds and/or van der Waals interactions across the
35 interface.

The modification of protein residues to enhance protein binding affinity is not restricted to those residues in the relevant protein-protein interfaces. Modification of residues outside of an interface may lead to alterations due to changes in the long-range electrostatic interactions between the two interacting proteins which changes the rate of association and subsequently the equilibrium binding constant (Selzer and Schreiber (1999) *J Mol Biol.* 287: 409-419.; Selzer et al., (2000) *Nat Struct Biol.* 7: 537-541.). The contribution of mutations to the association rate can be calculated and has been used to increase the association rate (without greatly changing the dissociation rate) and the affinity of β -lactamase inhibitory protein to TEM1 β -lactamase by a factor of 250 (Selzer et al., (2000) *Nat Struct Biol.* 7: 537-541.).

There are two proposed modes of antagonist action of appropriate extracellular fragments of EGFR family members. The first is ligand binding. The sEGFR501 binds EGF and TGF α with approximately 10 times higher affinity than the full length extracellular portion of the EGFR (Elleman et al., (2001) *Biochemistry.* 40: 8930-8939.). The second mode is the association of these proteins with full-length receptors. Recombinant forms of the EGFR and ErbB-2 which contain only the extracellular domain and transmembrane domain are able to inhibit EGF-induced signalling when expressed on cells which also express the full length EGF receptor (Kashles et al., (1991) *Mol Cell Biol.* 11: 1454-1463; Spivak-Kroizman et al., (1992) *J Biol Chem.* 267: 8056-8063; Qian et al., (1999) *J Biol Chem.* 274: 574-583.), suggesting that the recombinant proteins act in a dominant negative manner which involves their extracellular regions.

The structure of the EGFR complex can be used to design mutations for extracellular fragments of EGFR family. Structural models of the other EGFR family members can be constructed as previously described. Mutations can be made either by expressing mutant versions of EGFR 1-501 or its homologues in which residues have been mutated individually or as groups, or by using the structure to locate amino acid positions which can be changed using methods such as phage display or DNA shuffling. These mutants can be tested or selected for enhanced affinity relative to the extracellular fragment based on the wild type EGFR family member's amino acid sequence. The preferred EGFR amino acids which are candidates for mutation are as follows:-

(i) 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127, 128, 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467, or

(ii) 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288, 318.

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The relevant residues for other members of the EGF receptor family can be determined from sequence alignments.

Additionally, the mutation of residues which are outside of the relevant binding interface may also alter the binding affinity by changes in the long range electrostatic interactions. These changes can affect the rate of association between two interacting proteins without greatly changing the rate of dissociation, and hence change the equilibrium binding constant (Selzer and Schreiber (1999) *J Mol Biol.* 287: 409-419.; Selzer et al., (2000) *Nat Struct Biol.* 7: 537-541.). In one example of increasing the affinity of binding by mutating residues outside of the protein-protein interface, selected residues of the β -lactamase inhibitory protein that were outside of the interface were mutated so as to change their charge e.g. a basic residue mutated to a neutral residue and then the affinity and rate constants of the mutant binding to TEM1 β -lactamase was measured. In one mutant, the change of four amino acids led to an enhancement of binding by a factor of more 250-fold (Selzer et al., (2000) *Nat Struct Biol.* 7: 537-541.). In this example, the authors specified a formula which predicted the changes in the association constant upon mutation to within a factor of two (Selzer et al., (2000) *Nat Struct Biol.* 7: 537-541.). In this way, the structure of the EGFR or a model of one other EGFR family members could be used to predict mutations that would likely lead to an enhancement of the rate of association of the relevant EGFR family extracellular fragment to its interacting protein. Calculation and subsequent visualization of the electrostatic isopotentials (e.g. Smith and Treutlein (1998) *Protein Sci.* 7: 886-896.) may assist the selection of residues to mutate in order to increase the protein's rate of association. The most likely candidate residues for mutation are those on the periphery of the interface and those outside of the interface but which are within a specified distance of the interacting protein and are not completely buried in the L1 or L2 domain (as judged by visual examination). Cysteine residues, which are needed for the maintenance of the EGFR structure were also excluded from the list. For the EGFR, the preferred residues are:

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- (i) 5, 6, 8-10, 19, 21-25, 28, 32, 33, 38, 39, 40, 42, 44, 47, 48, 50, 63, 64, 66, 68, 71, 73, 87, 88, 91-94, 96, 104-107, 109, 123, 130, 131, 151-160, 315-324, 326, 328, 329, 331, 332, 343, 344, 351, 359-363, 379, 380, 385, 387, 388, 394, 404-407, 410, 413, 420, 434-436, 440, 441, 443, 448, 449, 461-464, 466-468; or
- (ii) 1-6, 8, 9, 11, 30, 35, 36, 39, 40, 60, 62-64, 82, 84, 85, 87-89, 94, 118, 120-122, 148, 187-193, 196-198, 200-203, 209-211, 213, 215, 217-221, 231-233, 235, 237, 238, 241, 243, 244, 247, 254-261, 266, 268-270, 272-274, 276, 277, 281, 289-297, 299-301, 303, 304, 311, 312, 314-317, 319-323, 335, 340, 342-344, 346, 376, 378-380, 403-412, 434, 459.

The relevant residues for other members of the EGF receptor family can be determined from sequence alignments.

In an eighth aspect the present invention provides computer-assisted method for identifying potential compounds able to interact with a member of the EGF receptor family and thereby modulate an activity mediated by receptor, using a programmed computer comprising a processor, an input device, and an output device, comprising the steps of:

- (a) inputting into the programmed computer, through the input device, data comprising the atomic coordinates of amino acids 1-501 of the EGF receptor molecule as shown in Appendix I, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or more subsets of said amino acids related to the coordinates shown in Appendix I by whole body translations and/or rotations;
- (b) generating, using computer methods, a set of atomic coordinates of a structure that possesses stereochemical complementarity to the atomic coordinates of amino acids 1-501 of the EGF receptor molecule as shown in Appendix I, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or more subsets of said amino acids related to the coordinates shown in Appendix I by whole body translations and/or rotations, thereby generating a criteria data set;
- (c) comparing, using the processor, the criteria data set to a computer database of chemical structures;

- (d) selecting from the database, using computer methods, chemical structures which are similar to a portion of said criteria data set; and
- (e) outputting, to the output device, the selected chemical structures which are complementary to or similar to a portion of the criteria data set.

In a preferred embodiment of the eighth aspect the subset of amino acids are the amino acids (i) defining either or both the ligand binding surface(s), or (ii) defining dimerization interface.

In a further preferred embodiment the method is used to identify potential compounds which have the ability to decrease an activity mediated by the receptor.

In a further preferred embodiment of the eighth aspect, the method further comprises the step of selecting one or more chemical structures from step (e) which interact with a member of the EGF receptor family in a manner such as to interfere with the binding of natural ligand to:-

- (i) one or more of the residues of EGFR selected from the group consisting of 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127, 128, 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467 and combinations thereof; or
- (ii) the corresponding region of other members of the EGF receptor family.

In a further preferred embodiment of the eighth aspect, the method further comprises the step of selecting one or more chemical structures from step (e) which interact with one or more of the residues of EGFR selected from the group consisting of amino acids 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288, 318 or the corresponding region of other members of the EGF receptor family.

In a further preferred embodiment of the eighth aspect, the method further comprises the step of obtaining a compound with a chemical structure selected in steps (d) and (e), and testing the compound for the ability to decrease an activity mediated by the receptor.

The present invention also provides a method of screening of a putative compound having the ability to modulate the activity of a molecule of the EGF receptor family, comprising the steps of identifying a putative compound by a method according to the first or third aspects, and testing the compound for the ability to increase or decrease an activity mediated by the molecule. In one

embodiment, the test is carried out *in vitro*. Preferably, the *in vitro* test is a high throughput assay. In another embodiment, the test is carried out *in vivo*.

In a ninth aspect the present invention provides a computer for producing a three-dimensional representation of a molecule or molecular
5 complex, wherein the computer comprises:

- 10 (a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein the machine readable data comprise the atomic coordinates of amino acids 1-501 of the EGF receptor molecule as shown in Appendix I, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or more subsets of said amino acids related to the coordinates shown in Appendix I by whole body translations and/or rotations;
- 15 (b) a working memory for storing instructions for processing the machine-readable data;
- (c) a central-processing unit coupled to the working memory and to the machine-readable data storage medium, for processing the machine-readable data into the three dimensional representation;
- 20 and
- (d) an output hardware coupled to the central processing unit, for receiving the three-dimensional representation.

In a preferred embodiment of the ninth aspect the subset of amino acids are the amino acids (i) defining either or both the ligand binding surface(s), or
25 (ii) defining dimerization interface.

In a tenth aspect the present invention provides a compound able to interact with a member of the EGF receptor family and to modulate an activity mediated by the receptor, the compound being obtained by a method according to the present invention.

30 In a preferred embodiment of the tenth aspect, the compound is a mutant of the natural ligand of a receptor of the EGF receptor family, where at least one mutation occurs in the region of the natural ligand which interacts with the receptor.

In an eleventh aspect the present invention provides a compound which
35 possesses stereochemical complementarity to a topographic region of a

molecule of the EGF receptor family and modulates an activity mediated by the molecule, wherein the molecule is characterised by

- (i) amino acids 1-501 of the EGF receptor positioned at atomic coordinates as shown in Appendix I, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å;
- (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I by whole body translations and/or rotations, or
- (iii) amino acids present in the amino acid sequence of a member of the EGF receptor family, which form an equivalent three-dimensional structure to that of the receptor site defined by amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in Appendix I;

with the proviso that the compound is not a naturally occurring member of the EGF receptor family or a mutant thereof.

By "mutant" we mean a ligand which has been modified by one or more point mutations, insertions of amino acids or deletions of amino acids.

In one embodiment of the eleventh aspect, the topographic region of the molecule is defined by is the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128 and/or the ligand binding surface defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467 or the corresponding regions of a member of the EGF receptor family.

In another embodiment of the eleventh aspect, the topographic region of the EGFR is defined by the dimerization interface defined by amino acids 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288, 318.

In preferred embodiments of the tenth and eleventh aspects, the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than $10^{-6}M$, more preferably less than $10^{-8}M$.

In other embodiments of the tenth and eleventh aspects, the compound decreases an activity mediated by the EGF receptor.

In a twelfth aspect, the present invention provides a pharmaceutical composition for preventing or treating a disease associated with signaling by a molecule of the EGF receptor family which comprises a compound according to

the ninth or tenth aspects of the present invention and a pharmaceutically acceptable carrier or diluent.

In a thirteenth aspect the present invention provides a method of preventing or treating a disease associated with signaling by a molecule of the EGF receptor family which method comprises administering to a subject in need thereof a compound according to the ninth or tenth aspects of the present invention. Preferably, the disease is selected from psoriasis and tumour states comprising but not restricted to cancer of the breast, brain, colon, prostate, ovary, cervix, pancreas, lung, head and neck, and melanoma, rhabdomyosarcoma, mesothelioma, squamous carcinomas of the skin and glioblastoma.

In a fourteenth aspect, the present invention provides a method for evaluating the ability of a chemical entity to bind to EGFR, said method comprising the steps of:

- (a) creating a computer model of at least one region of EGFR using structure coordinates wherein the root mean square deviation between said structure coordinates and the structure coordinates of amino acids 1-501 of EGFR as set forth in Appendix I or Appendix II is not more than about 1.5 Å;
- (b) employing computational means to perform a fitting operation between the chemical entity and said computer model of the binding surface; and
- (c) analysing the results of said fitting operation to quantify the association between the chemical entity and the binding surface model.

In one embodiment of the fourteenth aspect of the invention the region of EGFR is selected from the group consisting of the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128 and/or the ligand binding surface defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438 and 465 and a combination thereof.

In another embodiment of the fourteenth aspect the region of EGFR is the dimerization interface defined by amino acids 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318.

In a fifteenth aspect the present invention consists in a polypeptide complex in a crystallized form comprising the amino acids 1-501 of EGFR and TGF α .

It will be appreciated that isolated dimers of compounds comprising
5 extracellular fragments of members of the EGF receptor family (e.g. dimers of fragment 1-501 of EGFR) in the back-to-back configuration may be useful therapeutic agents given their ability to compete with natural receptors for binding to ligands of the EGF receptor family.

Accordingly, in a sixteenth aspect the present invention provides a
10 compound comprising fragment 1-501 of EGFR or an equivalent fragment of a member of the EGF receptor family, wherein the fragment is modified to induce dimerisation of the fragment in back-to-back configuration.

In one embodiment, the modification is made to a residue of the fragment which forms part of the back-to-back dimer interface. More
15 preferably, the modification involves substitution of at least one residue which forms part of the back to back dimer with a cysteine residue. The substitution may be P248C and/or A265C. Alternatively, the substitution may be D279C.

In another embodiment of the sixteenth aspect, the modification involves insertion of a dimerization sequence into the fragment. A "dimerization"
20 sequence allows the non-covalent association of one binding domain to another, with sufficient affinity to remain associated under normal physiological conditions.

Suitable dimerization domains that can be used in the context of the present invention would be known to those skilled in the art, or may be readily
25 identified using standard methods such as the yeast two hybrid system and traditional biochemical affinity binding studies. For example, an in vivo library-versus-library selection of optimized protein-protein interactions is described in Pelletier et al., (1999) Nature Biotechnology 17, 683.

Suitable dimerization sequences may be derived, for example, from Jun
30 and Fos, which are sequence specific DNA binding proteins that regulate transcription. Each protein has a bipartite DNA-binding domain consisting of an amphipathic helix that mediates dimerization through formation of a short coiled structure, termed a "leucine zipper". Suitable dimerization pairs for use in the present invention may include the leucine zipper of Jun or Fos and a protein
35 sequence that reacts with this leucine zipper. A method for identifying

mammalian proteins that react with the leucine zipper of Jun is described in Chevray & Nathans, (1992) *Proc. Natl. Acad. Sci. USA* 89, 5789.

Suitable dimerization sequences for use in the present invention also include:

- 5 (i) Heterodimeric coiled-coil peptide pairs as described in Arndt et al., (2000) *J. Mol. Biol.* 295, 627;
- (ii) The WW domain and ligands that bind thereto (see Dalby et al., (2000) *Prot. Sci.* 9, 2366);
- (iii) The bacterial nucleoid-associated proteins H-NS and StpA which
10 form homomeric or heteromeric complexes (see Dorman et al., (1999) *Trends Microbiol.* 7, 124); and
- (iv) Antibody domains, such as the first constant domain (C_H1 and C_L) of an IgG1 (see, for example, Mueller et al., (1998) *FEBS Lett* 422, 259).

In one embodiment, the dimerization sequence is inserted between
15 residues 194 and 195 or between residues 204 and 205 of EGFR or equivalent residues of another member of the EGF receptor family.

In yet another embodiment of the sixteenth aspect, the modification involves the lengthening of an appropriate loop structure (e.g. a loop within the S1 domain) which may then be cross-linked with the corresponding loop or a
20 different loop of the dimer partner by a linker. The linker may be, for example, a disulphide bond. The lengthening of the loop may be achieved, for example, by the insertion of additional residues between residues 210 and 211 or between residues 297 and 298 of EGFR or the equivalent residues of another member of the EGF receptor family.

25 In another embodiment of the sixteenth aspect, the fragment is conjugated to a molecule. The molecule may be, for example, a constant domain of an immunoglobulin molecule.

The present invention also encompasses compounds of the sixteenth aspect in dimer form.

30 The information provided in Appendix I and II also shows that there are a number of loop structures in the EGFR. From the three dimensional structure antibodies directed against these would interfere with binding of the natural ligand to the receptor or with the formation of active dimers.

Accordingly in a seventeenth aspect the present invention consists in an
35 antibody which binds to EGFR, the antibody being directed against (i) EGFR residues 100-108, 315-327 or 353-362; or (ii) EGFR residues 190-207, 240-305

or parts thereof or the corresponding regions of a member of the EGF receptor family.

Antibodies of the present invention may be produced, for example, by immunizing mice with purified EGFR fragment 1-501. After determining that
5 the mice are producing anti-EGFR antibodies, hybridomas may be prepared and antibody specificity assayed by ELISA or Flow Cytometry using two cell lines: Baf/wt-EGFR cells and Baf/EGFR-"mutation x" cells. These mouse cell lines express either the wild type EGFR or the EGFR containing an Ala substitution (ie mutation x) within the specific site against which the antibody is
10 to be directed. When hybridomas secreting antibodies which recognize Baf/wt-EGFR, but not Baf/EGFR-"mutant x" are identified, the corresponding hybridoma may be cloned and the monoclonal antibody purified.

Alternatively, in raising antibodies of the invention, it may be desirable to use derivatives of the peptides or loop structures which are conformationally
15 constrained. Conformational constraint refers to the stability and preferred conformation of the three-dimensional shape assumed by a peptide. Conformational constraints include local constraints, involving restricting the conformational mobility of a single residue in a peptide; regional constraints, involving restricting the conformational mobility of a group of residues, which
20 residues may form some secondary structural unit; and global constraints, involving the entire peptide structure.

The active conformation of the peptide may be stabilized by a covalent modification, such as cyclization or by incorporation of gamma-lactam or other types of bridges. For example, side chains can be cyclized to the backbone so
25 as create a L-gamma-lactam moiety on each side of the interaction site. See, generally, Hruby et al., "Applications of Synthetic Peptides," in Synthetic Peptides: A User's Guide: 259-345 (W. H. Freeman & Co. 1992). Cyclization also can be achieved, for example, by formation of cystine bridges, coupling of amino and carboxy terminal groups of respective terminal amino acids, or
30 coupling of the amino group of a Lys residue or a related homolog with a carboxy group of Asp, Glu or a related homolog. Coupling of the alpha-amino group of a polypeptide with the epsilon-amino group of a lysine residue, using iodoacetic anhydride, can be also undertaken. See Wood and Wetzel, 1992, Int'l J. Peptide Protein Res. 39: 533-39.

35 Further the conformation of the peptide analogues may be stabilised by including amino acids modified at the alpha carbon atom (eg. α -amino-150-

butyric acid) (Burgess and Leach, 1973, Biopolymers 12(12):2691-2712; Burgess and Leach, 1973, Biopolymers 12(11):2599-2605) or amino acids which lead to modifications on the peptide nitrogen atom (eg. sarcosine or N-methylalanine) (O'Donohue et al, 1995, Protein Sci. 4(10):2191-2202).

5 Another approach described in US 5,891,418 is to include a metal-ion complexing backbone in the peptide structure. Typically, the preferred metal-peptide backbone is based on the requisite number of particular coordinating groups required by the coordination sphere of a given complexing metal ion. In general, most of the metal ions that may prove useful have a coordination
10 number of four to six. The nature of the coordinating groups in the peptide chain includes nitrogen atoms with amine, amide, imidazole, or guanidino functionalities; sulfur atoms of thiols or disulfides; and oxygen atoms of hydroxy, phenolic, carbonyl, or carboxyl functionalities. In addition, the peptide chain or individual amino acids can be chemically altered to include a
15 coordinating group, such as for example oxime, hydrazino, sulfhydryl, phosphate, cyano, pyridino, piperidino, or morpholino. The peptide construct can be either linear or cyclic, however a linear construct is typically preferred.

As will be readily understood by person skilled in this field the methods of the present invention provide a rational method for designing and selecting
20 compounds including antibodies which interact with members of the EGF receptor family. In the majority of cases these compounds will require further development in order to increase activity. Such further development is routine in this field and will be assisted by the structural information provided in this application. It is intended that in particular embodiments the methods of the
25 present invention includes such further developmental steps.

In yet a further, eighteenth, aspect, the invention provides a method of utilizing molecular replacement to obtain structural information about a molecule or a molecular complex of unknown structure, comprising the steps of:

- 30 (i) crystallising said molecule or molecular complex;
- (ii) generating an X-ray diffraction pattern from said crystallized molecule or molecular complex;
- (iii) applying at least a portion of the structure coordinates set forth in Appendix I or Appendix II to the X-ray diffraction pattern to generate
35 a three-dimensional electron density map of at least a portion of the molecule or molecular complex whose structure is unknown.

The term "molecular replacement" refers to a method that involves generating a preliminary model of an EGF receptor family member extracellular domain crystal whose structure coordinates are unknown, by orienting and positioning a molecule whose structure coordinates are known (e.g., EGFR 1-501 coordinates from Appendix I or Appendix II) within the unit cell of the unknown crystal so as best to account for the observed diffraction pattern of the unknown crystal. Phases can then be calculated from this model and combined with the observed amplitudes to give an approximate Fourier synthesis of the structure whose coordinates are unknown. This, in turn, can be subject to any of the several forms of refinement to provide a final, accurate structure of the unknown crystal (Lattman, 1985, *Methods in Enzymology* **115**: 55-77; M. G. Rossmann, ed., "The Molecular Replacement Method", Int. Sci. Rev. Ser., No. 13, Gordon & Breach, New York, 1972). Using the structure coordinates of the EGFR 1-501 provided by this invention, molecular replacement may be used to determine the structural coordinates of a member of the EGF receptor family.

Throughout this specification, the terms "S1" domain and "cys-rich 1" ("CR1") domain are used interchangeably. Similarly, the terms "S2" domain and "cys-rich 2" ("CR2") domain are used interchangeably.

Throughout this specification, the word "comprise", or variations such as "comprises" or "comprising", will be understood to imply the inclusion of a stated element, integer or step, or group of elements, integers or steps, but not the exclusion of any other element, integer or step, or group of elements, integers or steps.

Brief Description of the Figures

Figure 1: Structure-based sequence alignment of the EGFR residues 1-501 and corresponding residues of ErbB-2, ErbB-3 and ErbB-4.

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Figure 2: Sequence alignment of EGF-like domains of ligands of the EGFR family. Note that the start and end of some of these domains are not precisely defined. The sequences are for the human forms of the proteins except for epigen and the EGF-like domain in neuregulin-4 which are the mouse forms of the respective proteins. Abbreviations: EGF - epidermal growth factor; TGF- α - transforming growth factor alpha; HB-EGF - heparin binding epidermal growth factor; NRG - neuregulin. There are four known neuregulin genes (NRG1, NRG2, NRG3 and NRG4), some of which encode alternatively spliced forms of the EGF-like domain. These forms are identified as the α - or β -form of the EGF-like domain.

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Figure 3. Polypeptide trace for the structure of the 2:2 complex of sEGFR501 and TGF α back-to-back dimer, comprising receptor molecule A, receptor molecule B, TGF α molecule C and TGF α molecule D. The dimer axis lies vertically, in the page.

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Figure 4. Structure-based sequence alignment of the human EGFR ectodomain, human TGF α and related proteins. (A) The receptor L1 and L2 domains plus the first module of the cys rich regions, S1 and S2. (B) Modules 2 to 8 of the receptor cys rich region S1 and modules 2 to 7 of S2. (C) Human TGF α , EGF and heparin binding EGF. Numbers in parentheses show where amino acid have been omitted and positions with conserved physicochemical properties of amino acids are boxed. Secondary structure elements are indicated above the sequences (and below in A), with shading as in Figure 5A. Also indicated are disulfide bonds and residues buried at protein-protein interfaces: L1-TGF α , 1; L2-TGF α , 2; L1-L2 contacts, 3 in A; L1- & L2-TGF α , 3 in B; S1 loop, L; residues to which the S1 loop binds, P; other residues in the dimer interface, D. Three types of disulfide bonded modules are indicated by bars below the sequences and residues not conforming to the S1 pattern are shaded grey.

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Figure 5. Comparison of sEGFR501 with the first three domains of IGF-1R. Domains 1-3 of IGF-1R are on the left, sEGFR501 as it appears in the complex is on the right. For clarity the ligand in the TGF α :sEGFR501 complex is not shown. L1 domains are oriented similarly.

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Figure 6. Structure of the ligand:receptor binding surfaces.

Ribbon representation showing the contacts between sEGFR501 and TGF α viewed from the left in Figure 3. Residue numbers for two important residues in TGF α are below the side chains.

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Figure 7. Stereoview of the molecule A S1 loop contacts with S1 of molecule B in the back-to-back dimer interface. Inter-chain hydrogen-bonds are drawn in black along with the hydrogen-bond from AsnA247 which stabilises the loop tip conformation. The single letter code and residue number is used for amino acid residues. The dimer axis lies vertically at the left between H280.

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Figure 8: Functional characterization of EGFR mutants expressed in BaF/3 cells. (A) Ligand binding by wild type and mutant EGFRs expressed in BaF/3 cells. Scatchard plots of ¹²⁵I-EGF binding to clones expressing the wt, E21A or Δ CR1 EGFR were analyzed using the Radlig program to yield estimates of receptor affinity. The three cell lines expressed comparable receptor numbers as assessed by M2 or 528 antibody binding and FACS analysis. Shown are the plots for cold ligand titration assay; identical results were obtained titrating the radiolabelled EGF (hot titration). (B) EGF-dependent tyrosine kinase activation. This was determined in total cell lysates by sequential immunoblotting with anti-phosphotyrosine (top) or anti-EGFR (bottom) antibodies. The anti-EGFR antibodies have slightly lower affinity for the hyperphosphorylated form of the EGFR. The results are representative of multiple experiments on at least four independently derived clones for each mutant. (C) Ligand-induced EGFR dimerization. Cross-linking of the EGFR via the extracellular portion was performed at 37°C to maximize dimer yield. Samples were analyzed by SDS-PAGE on 3-8% gradient gels and immunoblotting with anti-EGFR antibodies. These data are representative of at least four separate experiments.

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(D) Ligand-induced sEGFR501 dimerization. Cross-linking of wild type and CR1 loop mutant (Tyr246Asp, Asn247Ala, Thr249Asp, Tyr251Glu, Gln252Ala

and Met253Asp) was carried out as described previously (Elleman et al., 2001. Biochemistry 40:8930-8939).

Key to Sequence Listing

- 5 SEQ ID NO:1: EGFR as shown in Figure 1
- SEQ ID NO:2: ErbB-2 as shown in Figure 1
- SEQ ID NO:3: ErbB-3 as shown in Figure 1
- SEQ ID NO:4: ErbB-4 as shown in Figure 1
- SEQ ID NO:5: EGF domain as shown in Figure 2
- 10 SEQ ID NO:6: TGF- α domain as shown in Figure 2
- SEQ ID NO:7: Amphiregulin domain as shown in Figure 2
- SEQ ID NO:8: HB-EGF domain as shown in Figure 2
- SEQ ID NO:9: Betacellulin domain as shown in Figure 2
- SEQ ID NO:10: Epiregulin domain as shown in Figure 2
- 15 SEQ ID NO:11: Epigen domain as shown in Figure 2
- SEQ ID NO:12: NRG1 α domain as shown in Figure 2
- SEQ ID NO:13: NRG1 β domain as shown in Figure 2
- SEQ ID NO:14: NRG2 α domain as shown in Figure 2
- SEQ ID NO:15: NRG2 β domain as shown in Figure 2
- 20 SEQ ID NO:16: NRG3 domain as shown in Figure 2
- SEQ ID NO:17: NRG4 domain as shown in Figure 2
- SEQ ID NO:18: EGFR L1 domain as shown in Figure 4A
- SEQ ID NO:19: IGF 1R L1 domain as shown in Figure 4A
- SEQ ID NO:20: IGF 1R L2 domain as shown in Figure 4A
- 25 SEQ ID NO:21: EGFR L2 domain as shown in Figure 4A
- SEQ ID NO:22: EGFR S1 domain as shown in Figure 4B
- SEQ ID NO:23: IGF 1R S1 domain as shown in Figure 4B
- SEQ ID NO:24: EGFR S2 domain as shown in Figure 4B
- SEQ ID NO:25: TGF α domain as shown in Figure 4C
- 30 SEQ ID NO:26: EGF domain as shown in Figure 4C
- SEQ ID NO:27: hbEGF domain as shown in Figure 4C

Detailed description of Preferred Embodiments of the Invention

- 35 The present inventors have now obtained three dimensional structural information about the EGF receptor which enables a more accurate understanding of how the binding of ligand leads to signal transduction. Such

information provides a rational basis for the development of ligands for specific therapeutic applications, something that heretofore could not have been predicted *de novo* from available sequence data.

The precise mechanisms underlying the binding of agonists and
5 antagonists to the EGF receptor are not fully clarified. However, the binding of ligands to the receptor site, preferably with an affinity in the order of 10^{-8} M or higher, is understood to arise from enhanced stereochemical complementarity relative to naturally occurring EGF receptor ligands.

Such stereochemical complementarity, pursuant to the present invention,
10 is characteristic of a molecule that matches intra-site surface residues lining the groove of the receptor site as enumerated by the coordinates set out in Appendix I or Appendix II. Appendix II is a refined version of the coordinates provided in Appendix I.

Substances which are complementary to the shape and electrostatics or
15 chemistry of the receptor site characterised by amino acids positioned at atomic coordinates set out in Appendix I or Appendix II will be able to bind to the receptor, and when the binding is sufficiently strong, substantially prohibit binding of the naturally occurring ligands to the site.

It will be appreciated that it is not necessary that the complementarity
20 between ligands and the receptor site extend over all residues lining the groove in order to inhibit binding of the natural ligand.

In general, the design of a molecule possessing stereochemical complementarity can be accomplished by means of techniques that optimize, chemically and/or geometrically, the "fit" between a molecule and a target
25 receptor. Known techniques of this sort are reviewed by Sheridan and Venkataraghavan, *Acc. Chem Res.* 1987 20 322; Goodford, *J. Med. Chem.* 1984 27 557; Beddell, *Chem. Soc. Reviews* 1985, 279; Hol, *Angew. Chem.* 1986 25 767, Verlinde C.L.M.J & Hol, *W.G.J. Structure* 1994, 2, 577, Walters, W.P., Stahl, M.T., Murcko, M.A., *Drug Discovery Today* 1998, 3, 160; Langer, T. and Hoffmann, R.D., *Current Pharmaceutical Design* 2001, 7, 509; Good, A.,
30 *Current Opinion in Drug Disc. Devel.* 2001, 5, 301; and Gane, P.J. and Dean, P.M., *Curr. Opinion Struct. Biol.*, 2000, 10, 401. the respective contents of which are hereby incorporated by reference. See also Blundell et al., *Nature* 1987 326 347 (drug development based on information regarding receptor
35 structure) and Loughney, D.A., Murray, W.V., and Jolliffe, L.K. *Med. Chem.*

Res. 1999, 9, 579 (database mining application on the growth hormone receptor).

There are two preferred approaches to designing a molecule, according to the present invention, that complements the stereochemistry of the EGF receptor. The first approach is to in silico directly dock molecules from a three-dimensional structural database, to the receptor site, using mostly, but not exclusively, geometric criteria to assess the goodness-of-fit of a particular molecule to the site. In this approach, the number of internal degrees of freedom (and the corresponding local minima in the molecular conformation space) is reduced by considering only the geometric (hard-sphere) interactions of two rigid bodies, where one body (the active site) contains "pockets" or "grooves" that form binding sites for the second body (the complementing molecule, as ligand).

This approach is illustrated by Kuntz et al., J. Mol. Biol. 1982 161 269, and Ewing, T.J.A. et al., J. Comput-Aid. Mol. Design 2001, 15, 411, the contents of which are hereby incorporated by reference, whose algorithm for ligand design is implemented in a commercial software package, DOCK version 4.0, distributed by the Regents of the University of California and further described in a document, provided by the distributor, which is entitled "Overview of the DOCK program suite" the contents of which are hereby incorporated by reference. Pursuant to the Kuntz algorithm, the shape of the cavity represented by the EGF receptor site is defined as a series of overlapping spheres of different radii. One or more extant databases of crystallographic data, such as the Cambridge Structural Database System maintained by Cambridge University (University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, U.K.), the Protein Data Bank maintained by the Research Collaboratory for Structural Bioinformatics (Rutgers University, N.J., U.S.A.), LeadQuest (Tripos Associates, Inc., St. Louis, MO), Available Chemicals Directory (Molecular Design Ltd., San Leandro, CA), and the NCI database (National Cancer Institute, U.S.A) is then searched for molecules which approximate the shape thus defined.

Molecules identified in this way, on the basis of geometric parameters, can then be modified to satisfy criteria associated with chemical complementarity, such as hydrogen bonding, ionic interactions and Van der Waals interactions. Different scoring functions can be employed to rank and select the best molecule from a database. See for example Bohm, H.-J. and

Stahl, M. Med.Chem.Res. 1999, 9, 445. The software package FlexX, marketed by Tripos Associates, Inc. (St. Louis, MO) is another program that can be used in this direct docking approach (see Rarey, M. et al., J. Mol. Biol. 1996, 261, 470).

5 The second preferred approach entails an assessment of the interaction of respective chemical groups ("probes") with the active site at sample positions within and around the site, resulting in an array of energy values from which three-dimensional contour surfaces at selected energy levels can be generated. The chemical-probe approach to ligand design is described, for
10 example, by Goodford, J. Med. Chem. 1985 28 849, the contents of which are hereby incorporated by reference, and is implemented in several commercial software packages, such as GRID (product of Molecular Discovery Ltd., West Way House, Elms Parade, Oxford OX2 9LL, U.K.). Pursuant to this approach, the chemical prerequisites for a site-complementing molecule are identified at
15 the outset, by probing the active site with different chemical probes, e.g., water, a methyl group, an amine nitrogen, a carboxyl oxygen, and a hydroxyl. Favored sites for interaction between the active site and each probe are thus determined, and from the resulting three-dimensional pattern of such sites a putative complementary molecule can be generated. This may be done either
20 by programs that can search three-dimensional databases to identify molecules incorporating desired pharmacophore patterns or by programs which using the favored sites and probes as input perform *de novo* design.

 Programs suitable for searching three-dimensional databases to identify molecules bearing a desired pharmacophore include: MACCS-3D and ISIS/3D
25 (Molecular Design Ltd., San Leandro, CA), ChemDBS-3D (Chemical Design Ltd., Oxford, U.K.), and Sybyl/3DB Unity (Tripos Associates, Inc., St. Louis, MO).

 Programs suitable for pharmacophore selection and design include: DISCO (Abbott Laboratories, Abbott Park, IL), Catalyst (Accelrys, San Diego,
30 CA), and ChemDBS-3D (Chemical Design Ltd., Oxford, U.K.).

 Databases of chemical structures are available from a number of sources including Cambridge Crystallographic Data Centre (Cambridge, U.K.), Molecular Design, Ltd., (San Leandro, CA), Tripos Associates, Inc. (St. Louis, MO), and Chemical Abstracts Service (Columbus, OH).

De novo design programs include Ludi (Biosym Technologies Inc., San Diego, CA), Leapfrog (Tripos Associates, Inc.), Aladdin (Daylight Chemical Information Systems, Irvine, CA), and LigBuilder (Peking University, China).

Those skilled in the art will recognize that the design of a mimetic may
5 require slight structural alteration or adjustment of a chemical structure designed or identified using the methods of the invention.

The invention may be implemented in hardware or software, or a combination of both. However, preferably, the invention is implemented in computer programs executing on programmable computers each comprising a
10 processor, a data storage system (including volatile and non-volatile memory and/or storage elements), at least one input device, and at least one output device. Program code is applied to input data to perform the functions described above and generate output information. The output information is applied to one or more output devices, in known fashion. The computer may
15 be, for example, a personal computer, microcomputer, or workstation of conventional design.

Each program is preferably implemented in a high level procedural or object-oriented programming language to communicate with a computer system. However, the programs can be implemented in assembly or machine
20 language, if desired. In any case, the language may be compiled or interpreted language.

Each such computer program is preferably stored on a storage medium or device (e.g., ROM or magnetic diskette) readable by a general or special purpose programmable computer, for configuring and operating the computer
25 when the storage media or device is read by the computer to perform the procedures described herein. The inventive system may also be considered to be implemented as a computer-readable storage medium, configured with a computer program, where the storage medium so configured causes a computer to operate in a specific and predefined manner to perform the
30 functions described herein.

Compounds designed according to the methods of the present invention may be assessed by a number of *in vitro* and *in vivo* assays of hormone function. For example, the identification of EGF receptor antagonists of may be undertaken using a solid-phase receptor binding assay. Potential antagonists
35 may be screened for their ability to inhibit the binding of europium-labelled EGF receptor ligands to soluble, recombinant EGF receptor in a microplate-based

format. Europium is a lanthanide fluorophore, the presence of which can be measured using time-resolved fluorometry. The sensitivity of this assay matches that achieved by radioisotopes, measurement is rapid and is performed in a microplate format to allow high-sample throughput, and the approach is gaining wide acceptance as the method of choice in the development of screens for receptor agonists/antagonists (see Apell et.al. J. Biomolec. Screening 3:19-27, 1998 : Inglese et. al. Biochemistry 37:2372-2377, 1998).

Binding affinity and inhibitor potency may be measured for candidate inhibitors using biosensor technology.

The EGF receptor antagonists may be tested for their ability to modulate receptor activity using a cell-based assay incorporating a stably transfected, EGF-responsive reporter gene (Souriau et al., 1997, Nucleic Acids Res. 25:1585-1590). The assay addresses the ability of EGF to activate the reporter gene in the presence of novel ligands. It offers a rapid (results within 6-8 hours of hormone exposure), high-throughput (assay can be conducted in a 96-well format for automated counting) analysis using an extremely sensitive detection system (chemiluminescence). Once candidate compounds have been identified, their ability to antagonise signal transduction via the EGF-R can be assessed using a number of routine in vitro cellular assays such as inhibition of EGF-mediated cell proliferation. Ultimately, the efficiency of antagonist as a tumour therapeutic may be tested in vitro in animals bearing tumour isografts and xenografts as described (Rockwell et al., 1997, Proc Natl Acad Sci U S A 94:6523-6528; Prewett et al., 1998 Clin Cancer Res 4:2957-2966).

Tumour growth inhibition assays may be designed around a nude mouse xenograft model using a range of cell lines. The effects of the receptor antagonists and inhibitors may be tested on the growth of subcutaneous tumours.

EXAMPLES

Example 1: Protein preparation of sEGFR501

The derivation of stably transfected Lec8 cells expressing sEGFR501 and the subsequent purification and characterisation of the secreted ectodomain has been described in detail (Elleman et al., 2001, Biochemistry 40:8930-8939.). Purified sEGFR501 was shown, by isoelectric focusing gels to

be unstable on storage, the majority of isoforms being transformed into products with less acidic isoelectric points. This change was accompanied by a small mobility increase (estimated at 1-2 kDa) on SDS polyacrylamide gels. N-terminal sequence analysis showed that the new product retained the expressed N-terminus of sEGFR501, suggesting that the apparent 1-2 kDa reduction in mass and increase in positive charge might be due to partial or complete loss of the acidic-residue rich C-terminal tag and enterokinase cleavage site. Prolonged storage led to the majority of protein converting to the least acidic isoform of pI ~6.6, which appeared to remain stable. The conversion of a fresh preparation of sEGFR501 to a stable, less acidic isoform was more reproducible and rapid if it was subject to limited proteolysis at ambient temperature in Tris-buffered saline (pH8) for ~180 min with endoproteinase Asp-N (Boehringer-Mannheim) at an enzyme: protein ratio of 1:1000 (w/w). The least-acidic isoform of apparent pI ~6.2 was isolated from the other components by anion exchange chromatography. The digest was bound to three Uno Q2 columns (BioRad) connected in series to a BioLogic HR liquid chromatography instrument in 20 mM ethanolamine /50 mM taurine pH8.0 buffer and the least acidic form was the first product obtained by isocratic elution in the same buffer containing 15 mM lithium acetate. The purified protein was incubated with endoglycosidase F (PNGase-free -

Boehringer Mannheim) at a ratio of 10-20 Units/mg protein, followed by rechromatography over Superdex 200 to remove enzyme and low molecular weight cleavage products.

Example 2: Crystallization and Data Collection

sEGFR501 obtained from the above procedures appeared nearly homogeneous on SDS and IEF gels and was used in crystallization trials alone and in combination with several ligands. The best diffracting crystals were obtained from mixtures containing a five-fold molar quantity of human TGF α (GroPep receptor grade) compared to sEGFR501. Crystals of sEGFR501 in complex with TGF α were grown in 7% PEG 3350, 20% Trehalose, 10 mM CdCl₂ and 100mM HEPES, pH 7.5, and belonged to the space group P2₁ (a = 51.59, b = 198.71, c = 78.90 Å, β = 102.03°). These crystals were cryo-cooled to -170°C in the same mother liquor. Data were recorded on a Rigaku RAXIS VI area detector using a Siemens M18XHF X-ray generator with Yale/MS

C mirrors or a Rigaku RU300 generator and AXCO capillary optics. Crystals

were also derivatised by soaking in mother liquor containing 1-10 mM heavy atom compounds and diffractions data were collected as before and statistics are given in Table 1. The resolution limit was defined as where $I/\sigma = 2$ for 50% of the reflections. Notable anisotropy was observed for the diffraction limit of the crystals and in the mosaic spread of diffraction maxima.

Example 3: Phase Determination and Structure Refinement

Phasing by multiple isomorphous replacement was performed with programs from CCP4 (Collaborative Computational Project Number 4, 1994) and SHARP (De La Fortelle and Bricogne, 1996, , Methods Enzymol. 276: 472-494) and the resulting electron density maps were improved by solvent flattening and histogram matching with DM (Cowtan, K. 1994, Joint CCP4 and ESF-EACBM Newslett. Protein Crystallogr. 31:34-38). Details are given in Table 1. Density averaging using noncrystallographic symmetry was not of much value as the proteins corresponded to more than three rigid groups. The polypeptide chains for two receptor and two ligand molecules were fitted manually and refined with CNS (Brunger, et al., 1998, X-PLOR Reference Manual 3.851, Yale Univ., New Haven, CT). As the highest resolution data were collected for the PIP derivative these data were use for the final stages of refinement. During the refinement an overall anisotropic temperature factor was applied, with the magnitude of the semi-axes being -18.4 , 5.6 and 12.7 \AA^2 . The refined structure contains 1097 amino acids, 14 carbohydrate residues, 7 Pt^{2+} , 11 Cd^{2+} and 4 Cl^- ions and 79 water molecules. Poor density was observed for residues 148-160 and 289-307 in each receptor and no density was found for ligand residues C1 and D1-D2 and receptor residues A306 and beyond residues A500 and B501.

Example 4: Construction of N-terminal tagged EGF receptor and mutants

The polymerase chain reaction (PCR) using a human EGFR cDNA (Accession # x00588) (Ullrich et al., 1984, Nature 309:418-425) was used to generate EGFR expression constructs. It is noted that the original EGFR cDNA sequence contains an error at position 1806G (Accession # x00588). The correct base is 1806C, which destroys the Hind III restriction site in the original cDNA sequence. To construct the FLAG tag at the N-terminus of the receptor, PCR products containing EGFR leader sequence (and small portion of 5' non-coding sequence, base pair 131 to 261), followed by the FLAG coding

sequences with Hind III and Xho I on its 5' and 3' ends, respectively, were generated and cloned into a mammalian expression vector pcDNA3 (Invitrogen) using those restriction sites. The Xho I site coding for Leu and Glu of mature EGFR residues 1 and 2 was generated by silent mutation and an Xba I site was generated after the stop codon (3817-3819) of EGFR cDNA using PCR. Cloning such modified EGFR cDNA into the FLAG tag containing pcDNA3 vector yielded the wild-type N-terminus tagged EGF receptor construct, M2-EGFR. PCR products containing point mutations and S1-loop deletion were cloned using the wild-type M2-EGFR as a template. The point mutation constructs are E21A, R470L, N473D, S474E and A477D. The S1-loop deletion construct contains a replacement of nucleotides 988-1035 by GCC, resulting in S1-loop residues 244-259 being replaced by a single alanine residue. The sEGFR501 S1-loop mutant (Tyr246Asp, Asn247Ala, Thr249Asp, Tyr251Glu, Gln252Ala and Met253Asp) was generated by oligonucleotide-directed in vitro mutagenesis using the USB-T7 Gen kit, transiently expressed, purified and characterised as described previously (Elleman et al., 2001. Biochemistry 40:8930-8939).

Example 5: Transient expression of wild-type and mutant EGFR

NIH3T3 and 293 cells were obtained from the American Type Culture Collection. The cells were grown in a 10% CO₂ atmosphere at 37 °C in Dulbecco's modified Eagle's medium (for NIH3T3) or in RPMI medium (for 293) (both from Life Technologies. Inc.) containing 10% foetal bovine serum (CSL, Australia), 60 µg/ml penicillin and 100 µg/ml streptomycin. Transient transfections were performed using FuGENETM 6 (Roche Molecular Biochemicals) according to manufacture's protocol. Cells were seeded at ~10% (for NIH3T3) or ~25% (for 293) confluency in 6-well plate and transfected with 0.5 µg plasmid DNA per construct per well. Transfected cells were assayed two days later. For western blotting, cells were washed with serum-free medium, starved for 2 hr and treated with or without EGF (100ng/ml) for 10 min. Whole cell lysates were prepared, fractionated by SDS-gel electrophoresis using 4-20% polyacrylamide gels and western blotted using the monoclonal antibodies M2 (anti-FLAG, Sigma) and 4G10 (anti-phosphotyrosine, Upstate Biotechnology) as described (Walker et al, 1998, Growth Factors 16, 53-67).

Example 6: Characterisation of wild-type and mutant EGFR stably expressed in BaF/3 cells.

The isolation and characterisation of stably transfected cell lines expressing wild-type and mutant EGFRs was performed using the IL3-dependent murine hemopoietic lineage BaF/3 (Walker et al, 1998, Growth Factors 16, 53-67). Expression vectors containing the appropriate EGFR constructs were transfected individually by electroporation using a Gene Pulser (BioRad) according to manufacturer's instructions. Neomycin-resistant pools were generated by selection in G418, and cloned by limiting dilution to obtain stable cell lines. Cell-surface expression of receptors was detected by FACScan (Fluorescence Activated Cell Scan, Becton and Dickinson) using the anti-EGFR monoclonal antibody 528 (Gill et al., 1984, J. Biol. Chem. 259:7755-7760) and the M2 anti-FLAG antibody (Brizzard et al., 1994, Biotechniques 16:730-735). Ligand binding studies and Scatchard analysis were performed using iodinated murine EGF as previously described (Walker et al, 1998, Growth Factors 16, 53-67). Scatchard plots and estimates of affinities and receptor numbers were obtained using the Radlig program (Kell for Windows, BioSoft). Ligand-induced receptor kinase activation was analysed by immunoblotting cell lysates with 4G10. For receptor cross-linking studies, washed cells were incubated in PBS with or without EGF (100ng/ml) and with or without BS3 (Pierce; 1.3mM) for 20 min at 37°C. The cells were then lysed and analysed by immunoblotting using a polyclonal sheep anti-EGFR antibody (Upstate Biotechnology) as described (Walker et al., 1998. Mol. Cell Biol. 18:7192-7204).

Example 7: Overall Structure

sEGFR501 is comprised of three structural domains, namely L1, S1 and L2 plus the first module from the second cys-rich region S2. Crystals of TGF α :sEGFR501 contain two molecules of each polypeptide in the asymmetric unit. There are two possible dimer interactions: a back-to-back dimer dominated by interactions between the S1 domains of each receptor and a head-to-head dimer involving contacts between the L1 and L2 domains. The back-to-back complex is approximately 33 x 78 x 103 Å while the head-to-head complex is 65 x 75 x 128 Å. Each TGF α molecule is clamped between the L1 and L2 domains from the same sEGFR501 molecule, and makes contact with only one receptor molecule in the dimer. In the back-to-back dimer the two

ligands are located on opposite sides of the complex with the closest approach 70.9 Å apart. In the head-to-head dimer the two ligands are centrally located, and are separated by 15 Å.

We conclude that the back-to-back dimer corresponds to the 2:2
5 TGF α :sEGFR501 complex that is formed in solution (Elleman et al., 2001. Biochemistry 40:8930-8939) from comparisons of the amount of buried surface area in the two dimer options, the lack of symmetry in the head-to-head dimer compared to that seen in the back-to-back dimer, the sequence conservation at the dimer interfaces (described later) and the characteristics of the receptors
10 mutated at both interfaces (described later). In the head-to-head dimer only 510 Å² of accessible surface area is buried on each molecule and this is distributed over two patches 39 Å apart. The residues involved are 21, 24, 25, 28 and 48-51 on both L1s, 471, 473, 474, 476 and 477 on both L2s plus 32 (molecule A) and 443 and 478 from molecule B. In contrast, in the back-to-
15 back dimer 1125 Å² on each receptor is buried. Biologically relevant protein-protein interfaces usually bury more than 700 Å² of surface per molecule and often about 1000 Å² (Lo Conte et al., 1999, J. Mol. Biol. 285:2177-2198), implying that the back-to-back configuration is more likely to be the functional dimer. There is a lack of symmetry at the two L1-L2' interfaces in the head-to-
20 head dimer which corresponds to a 6 Å translation of the L2' helix (residues 471-479) relative to the L1 helix. Such structural ambiguity is not seen in the back-to-back dimer (Figure 3), the non-crystallographic symmetry being very close to a pure two-fold rotation, implying that this is the functional dimer. It is further supported by experiments where a model of the EGF receptor S2
25 domain (Jorissen et al., 2000, Protein Sci. 9:310-324) was superimposed onto the structure determined here for the first modules of the S2 domains of the two sEGFR501 molecules. In the back-to-back dimer the rod-like domains of S2 project towards each other underneath sEGF501, consistent with the ability to form disulfide-linked dimers via a Cys mutation three residues upstream of the
30 transmembrane domain when ligand binds to mutant receptors (Sorokin et al., 1994, J. Biol. Chem. 269:9752-9759). The same superimposition performed on the head-to-head dimer results in the modelled S2 domains projecting away from each other and is inconsistent with the Cys mutant data (Sorokin et al., 1994, J. Biol. Chem. 269:9752-9759).

Example 8: Receptor domain architecture

The L1, S1 and L2 domains show both sequence (Figure 4) and structural (Figure 5) homology to the first three domains of the type I insulin-like growth factor receptor (Garrett et al., 1998, Nature 394:395-399). More
5 broadly, the L domains resemble other leucine-rich repeat or solenoid proteins (Ward, C. W. and Garrett, T. P. J. 2001, BMC Bioinformatics 2, 4 ; Kobe B. and Kajava, A. V. 2001, Curr. Opin. Struct. Biol. 11:725-732). Each L domain is composed of six turns of a β -helix or solenoid and is capped at each end by a helix and a disulfide bond. At the C-terminus of the L domains the helix is only
10 vestigial and in each case there is intimate association with the first module of S1 or S2. A conserved Trp from each of these first modules (Trp176 in S1 and Trp492 in S2) is inserted into the body of the L domain between the fourth and fifth turns of the β -helix as seen in IGF-1R (Garrett et al., 1998, Nature 394:395-399), making these modules structurally part of the L domain. In each
15 case the loops in the first cys-rich modules of the S1 and S2 domains of sEGFR501 are shorter than those in IGF-1R and similar in size to the other modules in sEGFR501 (modules 2 and 3 in S1 and 4 and 7 in S2) which contain two disulfide bonds (Figures 4A and 4B).

Each of the L domains contains a large β -sheet (second sheet, in Figure
20 5), flanked by two shorter ones on either side (blue and yellow). The edge between the first and second β -sheets is characterised by the presence of a stack of conserved Gly residues at positions 39, 63, 85, 122 in L1 and 343, 379, 404 and 435 in L2 (Figure 4A). The edge at the junction of the second and third β -sheets is formed, in part, by a short Asn ladder as in IGF-1R
25 (Garrett et al., 1998, Nature 394:395-399). A loop from the fourth turn of each solenoid protrudes from the large (second) β -sheet and is common to the EGF and IGF receptor families. Opposite the large β -sheet in both L1 and L2 there is a more irregular face, with the polypeptide strands in the third, fourth and fifth turns in L2 having a similar conformation to those in IGF-1R L1 but different
30 from those in EGFR L1.

For both L1 and L2 domains of EGFR the long β -strand in the first turn of the solenoid is missing. In L1 this strand is replaced by a long V-shaped excursion (residues 8-18) of the polypeptide chain which sits over the large β -sheet of this domain to form a major part of L1's ligand-binding surface (Figure
35 6). In L2 this second strand is replaced by a loop (residues 316-326) which also contacts the ligand (Figure 6).

The order and association of the eight disulfide-bonded modules in S1 are similar to that of IGF-1R (Figures 4A and 4B), with the first module packed against the fourth face of the L1 domain as discussed above and modules 2-8 forming a rod-like domain (Figure 5) spanning from L1 to L2. Relative to IGF-1R, each of the disulfide bonded modules in sEGFR501 is oriented slightly differently to the previous one ($8-36^\circ$), with the cumulative effect being that S1 of the EGFR appears as a straight rod, bent at module 6, whereas in IGF-1R the S domain is curved. Even for the two molecules of EGFR in the crystal's asymmetric unit there is a relative difference between modules 6 and 7 of 12° , implying that the modules are not always rigidly associated.

Like IGF-1R, S1 of EGFR makes contact with L1 along one side of the solenoid (sheet 1, burying 1375 \AA^2 of accessible surface area) but in EGFR, S1 also makes appreciable contact with the L2 domain via modules 6 and 7 (burying 860 \AA^2). This is different to the IGF-1R structure where the L2 domain is rotated away to lie almost perpendicular to the axis of L1 (Figure 5). Thus the C-terminal region of S1 may act as a hinge in the ligand-free form of the EGFR as modules 7 and 8 appear somewhat mobile, having some of the largest temperature factors in the structure.

The most striking feature of S1 is a large ordered loop from module 5 which projects directly away from the ligand-binding site. The loop consists of residues 242-259 and contains an antiparallel β -ribbon (Figure 5). This loop is highly conserved within the EGFR family and is different to the insulin receptor family where a loop of similar size points from module 6 into the ligand-binding site (Figure 5). If EGFR were to have a loop similar to IGF-1R, there would be a substantial steric clash between that loop and L2.

Example 9: Structure of TGF α

More than 10 mitogenic peptides form a family of ligands which can bind to members of the EGFR family. However, apart from residues Gly19, Gly40 and the three conserved disulfide bonds which are needed to maintain structure, only Arg42 is conserved throughout the family and pairwise sequence identities between the ligands are often less than 35%. Three-dimensional structures have been determined by NMR for EGF (Montelion et al., 1987, Proc. Natl Acad. Sci. U S A. 84, 5226-5230; Cooke et al., 1987, Nature 327:339-341; Kohda et al., 1992, Biochemistry 31:11928-11939; Barnham, et al., 1998, Protein Sci. 7:1738-1749), TGF α (Tappin et al., 1989,

Eur. J. Biochem. 179, 629-637; Harvey et al, 1991, Eur. J. Biochem. 198:555-562; Moy et al., 1993, Biochemistry 32:7334-7353) and heregulin (Nagata et al, 1994, EMBO J. 13:3517-3523; Jacobsen et al, 1996, Biochemistry 35, 3402-3417) and by X-ray crystallography for heparin-binding EGF (HB-EGF) in
 5 complex with diphtheria toxin (Louie et al., 1997, Mol. Cell 1:67-78) and EGF (Lu, et al., 2001, J. Biol. Chem. 276:34913-34917). These structures show that TGF α and its relatives are relatively flexible molecules built on a small structurally conserved core. In particular, the N- and C-terminal residues are often quite disordered. From a comparison of the two molecules of EGF in the
 10 asymmetric unit, (Lu, et al., 2001, J. Biol. Chem. 276:34913-34917) found that the common structural core comprised only residues 13-21 and 30-47 (equivalent to 15-22 and 31-48 in TGF α , Figure 4C) which encompassed half of the large β -ribbon and a small, C-terminal β -ribbon. The structure of TGF α , seen here in the complex, shows substantially more order, with a third, N-
 15 terminal β -strand (residues 4-6) aligned with the large β -ribbon (residues 19-33) to form a three-stranded β -sheet and an ordered C-terminus. The structure of TGF α in the 2:2 complex is triangular or crescent shaped. The two TGF α molecules in the dimer superimpose well on each other (rmsd 0.70 for 44 C α atoms). They are structurally similar to the human EGF molecule A (rmsd 1.33
 20 Å for 41 C α atoms) in the EGF crystal structure (Lu, et al., 2001, J. Biol. Chem. 276:34913-34917) and even more closely to HB-EGF (0.66 Å for 34 C α atoms) in its complex with diphtheria toxin (Louie et al., 1997, Mol. Cell 1:67-78).

Example 10: Ligand-receptor interactions in the EGF receptor

25 In the complex, each sEGFR501 monomer interacts with a single TGF α molecule and each ligand interacts with the large β -sheets of both the L1 and L2 domains of one receptor molecule (Figures 3 and 6). Relative to IGF-1R, the position of L2 corresponds to a rotation by 105° at the L2/S1 module7 interface or 122-130°, relative to L1 of IGF-1R. More than a third of the ligand's
 30 accessible surface area is buried by the L1 and L2 domains of the receptor (about 745 Å² by L1 and about 785 Å² by L2) and over 60% of the ligand's residues make contact with the receptor. The footprint of the ligand on the receptor covers most of the large (second) sheet of each L domain, running from the top left corner to abut the loop in the fourth rung of the solenoid
 35 (Figures 3 and 6).

In the contact with L1, the inner curved face of the crescent-shaped TGF α sits across the large sheet and extends to the N-terminal helix of L1 (Figure 6). More than half the buried surface area of L1 comes from a V-shaped loop which runs across the large sheet, replacing the first strand of the corresponding sheet in IGF-1R. In the center of this interface TGF α makes contact with the receptor, primarily via main chain atoms. One strand from the large β -sheet of TGF α (residues 29-35) sits edge on to the receptor and aligns with the latter part of the V-shaped loop (residues 15-17) in L1's first solenoid turn. This enables the receptor to contribute part of the V as a fourth parallel β -strand to the first and larger of the ligand's two β -sheets (Figure 6). Asn12, which is conserved in all of the EGFR family except ErbB2, makes a side chain to main chain contact with the peptide N atom of Gly40 in TGF α . The O γ 1 atom of Thr15 from L1 also makes a hydrogen bond to Ala41 O of TGF α . This interface is also characterized by a small hydrophobic contact around Leu17 from L1 and hydrophilic and electrostatic interactions involving the ligand's 'B loop' residues Arg22, Gln26, Glu27 and Lys29 with the L1 domain residues Tyr45, Tyr101, Arg125, and Glu90 respectively. The location of the N-terminus of TGF α near Tyr101 in the complex is consistent with the chemical cross-linking data of (Woltjer et al., 1992, Proc. Natl. Acad. Sci. USA. 89, 7801-7805). It should be noted that the lack of conservation in ErbB2 of two key residues in this interface (Arg for Thr/Ser at position 15 and Met for Asn at position 12) would prevent any of the EGF family of ligands from binding to L1.

The interface between L2 and TGF α is formed mostly from the side chain atoms of both the ligand and receptor. TGF α sits on the flat face (i.e. the large β -sheet) of L2, surrounded by three loops (residues 316-326, 352-363 and 405-412) which project out from the plane of the sheet (Figure 6). The contact between the ligand and receptor is an alternating series of stripes of hydrophobic and hydrophilic interaction across the interface. These are as follows: (i) Phe15 of TGF α sits against Phe357 of EGFR; (ii) the strictly conserved Arg42 of TGF α is sandwiched between Phe15 and Phe17 of the ligand facilitating the correct orientation and environment to make a salt bridge with the strictly conserved Asp355 of the receptor; (iii) Phe 17 and the lower part of Glu44 from TGF α interact with Leu325, Leu348 and Val350 from L2; (iv) the next hydrophilic region contains four histidines, His18 and His45 of TGF α and His346 and His409 of L2, as well as Tyr38 and Glu44 from TGF α and Gln384 and Gln408 from L2; and (v) there is a hydrophobic pocket in L2

(Leu382, Gln408, His409, Phe412, Val 417, Ile438), centred over Ala415, which holds the highly conserved Leu48 of TGF α (Leu47 in EGF), the ligand residue with the largest buried surface. The C-terminus of TGF α is sandwiched between domains L1 and L2, with the side chain of Leu49 contacting both L
5 domains. Leu49 may well define the final positioning of the L domains in the complex. Lys465 from L2 is near the C-terminus of TGF α and may stabilise the terminal carboxyl group. Lys465 has been chemically cross-linked to residue 45 in a mutant form of mouse EGF (Summerfield et al., 1996, J. Biol. Chem. 271:19656-19659). Some carbohydrate nearby could possibly also affect ligand
10 binding.

There appears to be a number of key contacts, with the ionic interaction between TGF α Arg42 and EGFR Asp355 and the hydrophobic interaction between TGF α Leu48 and the hydrophobic pocket centred over EGFR Ala415 being particularly important. These features are conserved in all ErbB family
15 members.

Although the interactions of EGFR with TGF α are ostensibly the same for both molecules in the crystal's asymmetric unit, it should be noted that when the ligands are superimposed, the L1 domains differ by a rotation of 3.5° about Leu14 C γ and for the L2 domain approximately 8° about Ala415 C β in EGFR
20 and the side chain of Leu48 in TGF α . These observations suggest that while there may be a bit more flexibility in the TGF α :L2 interface, Leu48 is the major determinant of ligand binding to L2. The cluster of His residues in the middle of the L2 interface may play a part in release of the ligand at low pH following endocytosis.

25

Example 11: Receptor-receptor interactions

Unlike other growth factor receptor complexes, the ligand is not found at the dimer interface in the 2:2 complex of TGF α :sEGFR501. Thus ligand induced dimerization of sEGFR501 implies that binding of ligand induces a
30 conformational change in the receptor that promotes receptor-receptor interactions. The most notable feature of the back-to-back dimer is a long loop (residues 242-259) which is specific to the EGFR family and is not found in the CR of IGF-1R (Figures 4B and 5) or other members of the insulin receptor family. From each receptor the loop projects out from the fifth module of S1,
35 across the other S1 domain to a space between L1, L2 and S1 domains of the neighbouring receptor (Figure 3). Contact is made by residues 244-253 of the

S1 loop in, say, molecule A with residues 229-239, 262-278, and 282-288 on the concave face of the S1 domain of molecule B (Figure 3). The buried surface areas are 480 Å² and 330 Å², respectively. At specific positions in the S1 loop there is remarkable sequence conservation across all ErbB family members. Tyr246 is strictly conserved and is completely buried in the interface. The O_η atom of TyrA246 (receptor molecule A) makes hydrogen bonds with the GlyB264 N and CysB283 O atoms (receptor molecule B) and the phenyl ring sits against the C_β atoms of SerB262 and SerB282 and the face of the following peptides (Figure 7). Residue 251 is strictly conserved as Tyr or Phe and in this interface makes a hydrophobic contact via the benzene ring with the PheB263, GlyB264, TyrB275 and ArgB285. The O_η of TyrA251 is exposed to solvent. Additional hydrophobic contacts are made by ProA248 to PheB230 and AlaB265; and by MetA253 to ThrB278. There is also a hydrogen bond from TyrA251 O to ArgB285 N (Figure 7).

Other conserved residues of the S1 loop, such as Asn247 and Asn256, do not make contact with the other half of the dimer, but hydrogen bond back onto the main chain and appear to be important for maintaining the loop in the appropriate conformation. There are four positions in the loop (residues 243, 248, 255 and 257) where proline is found in at least one member of the human EGFR family with ErbB3 having as many as three prolines. These prolines would further stabilise the conformation of the loop.

The loop not only touches the S1 domain of its partner, but also reaches across to contact the L1 and L2 domains of the other receptor molecule (burying a surface area of 40 Å² on L1 and 5 Å² on L2). AsnB86 touches ThrA249 and, with a slight rearrangement, could form a hydrogen bond between the side chains. Neither residue is conserved in other ErbB receptors although polar residues predominate at these positions. ThrA250, which is conserved in other ErbB receptors, sits near IleB318 but the reason for the conservation is not apparent. Although these interactions are quite weak, it is possible that the binding of the loop from one receptor may be affected by binding of ligand to the other, as ligand binding may alter the relative positions of the L domains.

Two other regions also participate in the back-to-back dimer contact. One is near the two long loops, where Asp279 and His280 of receptor A make contact across the dimer axis with the corresponding residues from receptor B (Figure 3). A second region of contact is near the N-terminal end of the S1

domain in cys-rich module 2, where residues 193–195 and 204–205 from molecule A contact 193–194 and 204–205 from molecule B, burying about 225 Å².

5 **Example 12: Functional Characterisation of mutant EGFRs expressed in BaF/3 cells**

In order to establish the biological relevance of the two dimers identified in crystals of the TGFα:sEGFR501 complex, mutant receptors designed to probe the two dimer interfaces were analyzed. Single amino acid substitutions
 10 Glu21Ala, Arg470Leu, Asn473Asp, Ser474Glu and Ala477Asp were prepared to test the head-to-head dimer. When transiently expressed in 293 cells, which express low endogenous levels of EGFR (<1x10⁴ receptors/cell), or when stably expressed (Glu21Ala) in the hemopoietic cell line BaF/3 which do not express EGFR family members (Walker et al., 1998, Growth Factors 16:53-67),
 15 these mutants showed normal EGF binding, kinase activation, dimerization (Figure 8) and internalization (data not shown). In contrast mutants of the back-to-back dimer, an S1 loop deletion (residues Δ242-259) from the full length receptor and sEGFR501 with multiple substitutions in the S1 loop (Tyr246Asp, Asn247Ala, Thr249Asp, Tyr251Glu, Gln252Ala and Met253Asp)
 20 were defective. The ΔS1-loop clones fail to show ligand-induced dimerization and ligand-induced kinase activation and exhibit only low affinity binding (Figure 8A, B, C). The sEGFR501 mutants fail to show ligand-induced dimerization (Figure 8D) and exhibit 15 fold lower affinity binding on BIAcore (500 nM vs 30 nM for sEGFR501).

25

Conclusion

Ligand-induced dimerisation (or oligomerisation) of receptors is a common means of signal transduction and in all cases seen so far the ligand participates directly in the dimerisation of receptors. For VEGF/Flt-1
 30 (Wiesmann et al., 1997, Cell 91:695-704), nerve growth factor (NGF)/TrkA receptor (Weismann et al., 1999, Nature 401:184-188.), bone morphogenic protein (BMP)/BMP receptor (Kirsch et al., 2000, Nat. Struct. Biol. 7:492-496), interferon γ (IFNγ)/IFNγ receptor (Thiel et al., 2000, Structure Fold Des. 8:927-936) and tumour necrosis factor (TNF)/TNF receptor (Banner et al., 1993, Cell
 35 73:431-445), the ligand is a dimer or trimer before forming the 2:2 complex or 3:3 complex, and in the structures determined, the receptors do not contact

each other. In the 2:2 complex of the fibroblast growth factor (FGF)/FGF receptor the ligands do not contact each other but are dimerised by heparin (Plotnikov et al., 2000, Cell 101:413-424; Schlessinger et al., 2000, Molecular Cell 6:743-750; Sorokin et al., 1994 J. Biol. Chem. 269:9752-9759; Pelligrini et al., 2000, Nature 407:1029-1034). The FGF receptors do contact each other and the two FGF ligands lie at the dimer interface with a heparin molecule sitting between two FGFs. In the 2:2 complex of granulocyte colony stimulating factor (GCSF)/GCSF receptor (Aritomi et al., 1999, Nature 401:713-715) each ligand binds both receptors but there are no contacts between the two ligands or the two receptor fragments. Finally, in the growth hormone, erythropoietin and prolactin/receptor complexes, there is only one ligand molecule in the 1:2 complex and the two receptor molecules make contact with ligand and with each other (de Vos et al., 1992, Science 255:306-312).

The TGF α :EGFR complex represents a new and surprising way in which receptors and protein ligands interact. EGFR ligands bind at a site remote from the dimer interface and must modify the receptor to promote dimerisation. A precedent for this has been seen for much smaller ligands. For example, in the rat metabotropic glutamate receptor, a disulfide-linked homodimer, binds glutamate between two domains of the receptor monomer, causing them to go from an 'open' to a 'closed' form (Kunishima et al., 2000, Nature 407:971-977). Such a mechanism could also occur in the EGFR family where the ligand binds both L1 and L2, fixing the relative orientations of the two domains. Compared to IGF-1R there is a substantial rearrangement of L domains in EGFR (Figure 5) although a conformational change of such a magnitude would not be necessary. A smaller change in L domain positions upon ligand binding, possibly with hinge motions seen at the S1 module 5/6, 6/7 and 7/L2 interfaces (relative to IGF-1R), could enable EGFR extracellular domains to form dimers.

The disclosure of all publications referred to in this application are include herein by reference.

It will be appreciated by persons skilled in the art that numerous variations and/or modifications may be made to the invention as shown in the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive.

Claims:

1. A method of selecting or designing a compound that interacts with a receptor of the EGF receptor family and modulates an activity associated with the receptor, the method comprising
- 5 (a) assessing the stereochemical complementarity between the compound and a topographic region of the receptor, wherein the receptor comprises:
- 10 (i) amino acids 1-501 of the EGF receptor positioned at atomic coordinates as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å;
- (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations; or
- 15 (iii) amino acids present in the amino acid sequence of a receptor of the EGF receptor family, which form an equivalent three-dimensional structure to that of amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets thereof,
- 20 (b) obtaining a compound which possesses stereochemical complementarity to a topographic region of the receptor; and
- 25 (c) testing the compound for its ability to modulate an activity associated with the receptor.
2. A method as claimed in claim 1 wherein the receptor is EGFR and the topographic region of EGFR is the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.
- 30 3. A method as claimed in claim 2 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding
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surface of EGFR defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface of EGFR defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.

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4. A method as claimed in claim 1 wherein the receptor is ErbB-2 and the topographic region of ErbB2 is the surface defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135 and 136, and/or the surface defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419,
10 420, 423, 425, 426, 446, 448, 473 and 475.

5. A method as claimed in claim 4 wherein the compound is selected or designed to have portions that match residues positioned on the surface of ErbB2 defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97,
15 99-101, 133, 135 and 136, and/or the surface of ErbB2 defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475.

6. A method as claimed in claim 1 wherein the receptor is ErbB-3 and the
20 topographic region of ErbB-3 is the ligand binding surface defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

25

7. A method as claimed in claim 6 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding surface of ErbB-3 defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface of
30 ErbB-3 defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

8. A method as claimed in claim 1 wherein the receptor is ErbB-4 and the
35 topographic region of ErbB-4 is the ligand binding surface defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, and/or the ligand binding surface defined by amino acids 326, 347,

349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

9. A method as claimed in claim 8 wherein the compound is selected or
5 designed to have portions that match residues positioned on the ligand binding surface of ErbB-4 defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, and/or the ligand binding surface of ErbB-4 defined by amino acids 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

10

10. A method as claimed in claim 1 wherein the compound is selected or designed to interact with a site within 5 Å of atomic positions of the EGF receptor listed in Appendices III or IV or corresponding regions of other members of the EGF receptor family, such that the compound interferes
15 allosterically with the binding of a natural ligand to a member of the EGF receptor family.

11. A method of selecting or designing a compound that inhibits the formation of active dimers of receptors of the EGF receptor family, the method
20 comprising:

- (a) assessing the stereochemical complementarity between the compound and a topographic region of the receptor, wherein the receptor comprises:
 - (i) amino acids 1-501 of the EGF receptor positioned at atomic
25 coordinates as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å;
 - (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations; or
30
 - (iii) amino acids present in the amino acid sequence of a receptor of the EGF receptor family, which form an equivalent three-dimensional structure to that of amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in
35 Appendix I or Appendix II, or structural coordinates having a root

mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets thereof,

- (b) obtaining a compound which possesses stereochemical complementarity to a topographic region of the receptor; and
- 5 (c) testing the compound for its ability to inhibit the formation of active dimers of the receptors.

12. A method as claimed in claim 11 wherein the receptor is EGFR and the topographic region of the EGFR to which the compound, or a portion thereof,
10 has stereochemical complementarity is the dimer interface defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287.

15 13. A method as claimed in claim 12 wherein the compound is selected or designed to have portions that match residues positioned on the dimer interface of EGFR defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer
20 interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287.

14. A method as claimed in claim 11 wherein the receptor is ErbB-2 and the topographic region of the ErbB-2 to which the compound, or a portion thereof,
25 has stereochemical complementarity is the dimer interface defined by amino acids 36, 84, 202, 203, 211, 212, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326 and/or the dimer interface defined by amino acids 84, 201, 202, 211, 212, 236, 237, 246, 249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

30 15. A method as claimed in claim 14 wherein the compound is selected or designed to have portions that match residues positioned on the dimer interface of ErbB-2 defined by amino acids 36, 84, 202, 203, 211, 212, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326 and/or the
35 dimer interface defined by amino acids 84, 201, 202, 211, 212, 236, 237, 246, 249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

16. A method as claimed in claim 11 wherein the receptor is ErbB-3 and the topographic region of the ErbB-3 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 41, 89, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-279, 281-287 and 317 and/or the dimer interface defined by amino acids 89, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-279 and 281-286.

17. A method as claimed in claim 16 wherein the compound is selected or designed to have portions that match residues positioned on the dimer interface of ErbB-3 defined by amino acids 41, 89, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-279, 281-287 and 317 and/or the dimer interface defined by amino acids 89, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-279 and 281-286.

18. A method as claimed in claim 11 wherein the receptor is ErbB-4 and the topographic region of the ErbB-4 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 40, 88, 196, 197, 206, 207, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids 88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277, 280-281 and 283-286.

19. A method as claimed in claim 18 which further comprises selecting or designing a compound which has portions that match residues positioned on the dimer interface of ErbB-4 defined by amino acids 40, 88, 196, 197, 206, 207, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids 88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277, 280-281 and 283-286.

20. A method as claimed in any one of claims 11 to 19 wherein the compound is designed or selected to comprise a first domain which interacts with the dimer interface of a first EGF receptor family member and a second domain which interacts with the dimer interface of a second EGF receptor family member.

21. A computer-assisted method for identifying potential compounds able to interact with a member of the EGF receptor family and thereby modulate an activity mediated by receptor, using a programmed computer comprising a processor, an input device, and an output device, comprising the steps of:
- 5 (a) inputting into the programmed computer, through the input device, data comprising the atomic coordinates of amino acids 1-501 of the EGF receptor molecule as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations;
 - 10 (b) generating, using computer methods, a set of atomic coordinates of a structure that possesses stereochemical complementarity to a topographic region of the EGF receptor molecule, wherein the EGF receptor molecule is characterised by the atomic coordinates of amino acids 1-501 as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations, thereby generating a criteria data set;
 - 15 (c) comparing, using the processor, the criteria data set to a computer database of chemical structures;
 - 20 (d) selecting from the database, using computer methods, chemical structures which are similar to a portion of said criteria data set; and
 - 25 (e) outputting, to the output device, the selected chemical structures which are complementary to or similar to a portion of the criteria data set.
 - 30
22. A method as claimed in claim 21 wherein the receptor is EGFR and the topographic region of EGFR is the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface defined by amino acids 325, 346, 348-
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350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.

23. A method as claimed in claim 22 wherein the compound is selected or
5 designed to have portions that match residues positioned on the ligand binding surface of EGFR defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface of EGFR defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.

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24. A method as claimed in claim 21 wherein the receptor is ErbB-2 and the topographic region of ErbB2 is the surface defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135 and 136, and/or the surface defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419,
15 420, 423, 425, 426, 446, 448, 473 and 475.

25. A method as claimed in claim 24 wherein the compound is selected or designed to have portions that match residues positioned on the surface of ErbB2 defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97,
20 99-101, 133, 135 and 136, and/or the surface of ErbB2 defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475.

26. A method as claimed in claim 21 wherein the receptor is ErbB-3 and the topographic region of ErbB-3 is the ligand binding surface defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

30

27. A method as claimed in claim 26 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding surface of ErbB-3 defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface of
35 ErbB-3 defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

28. A method as claimed in claim 21 wherein the receptor is ErbB-4 and the topographic region of ErbB-4 is the ligand binding surface defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130,
5 131, and/or the ligand binding surface defined by amino acids 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

29. A method as claimed in claim 28 wherein the compound is selected or
10 designed to have portions that match residues positioned on the ligand binding surface of ErbB-4 defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, and/or the ligand binding surface of ErbB-4 defined by amino acids 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

15 30. A method as claimed in claim 21 wherein the receptor is EGFR and the topographic region of the EGFR to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275,
20 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287.

31. A method as claimed in claim 30 wherein the compound is selected or
25 designed to have portions that match residues positioned on the dimer interface of EGFR defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287.

30 32. A method as claimed in claim 21 wherein the receptor is ErbB-2 and the topographic region of the ErbB-2 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 36, 84, 202, 203, 211, 212, 237, 246, 249-253, 255-260, 269-272, 282,
35 285-287, 289-295 and 326 and/or the dimer interface defined by amino acids

84, 201, 202, 211, 212, 236, 237, 246, 249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

33. A method as claimed in claim 32 wherein the compound is selected or
5 designed to have portions that match residues positioned on the dimer
interface of ErbB-2 defined by amino acids 36, 84, 202, 203, 211, 212, 237,
246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326 and/or the
dimer interface defined by amino acids 84, 201, 202, 211, 212, 236, 237, 246,
249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

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34. A method as claimed in claim 21 wherein the receptor is ErbB-3 and the
topographic region of the ErbB-3 to which the compound, or a portion thereof,
has stereochemical complementarity is the dimer interface defined by amino
acids 41, 89, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275,
15 278-279, 281-287 and 317 and/or the dimer interface defined by amino acids
89, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275,
278-279 and 281-286.

35. A method as claimed in claim 34 wherein the compound is selected or
20 designed to have portions that match residues positioned on the dimer
interface of ErbB-3 defined by amino acids 41, 89, 194, 195, 204, 205, 230,
239, 242-246, 248-253, 262-265, 275, 278-279, 281-287 and 317 and/or the
dimer interface defined by amino acids 89, 193, 194, 204, 205, 229, 230, 239,
242, 244-246, 248-253, 262-265, 275, 278-279 and 281-286.

25

36. A method as claimed in claim 21 wherein the receptor is ErbB-4 and the
topographic region of the ErbB-4 to which the compound, or a portion thereof,
has stereochemical complementarity is the dimer interface defined by amino
acids 40, 88, 196, 197, 206, 207, 232, 241, 244-248, 250-255, 264-267, 277,
30 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids
88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277,
280-281 and 283-286.

37. A method as claimed in claim 36 which further comprises selecting or
35 designing a compound which has portions that match residues positioned on
the dimer interface of ErbB-4 defined by amino acids 40, 88, 196, 197, 206,

207, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids 88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277, 280-281 and 283-286.

- 5 38. A method as claimed in any one of claims 21 to 37 which further comprises the step of obtaining a compound with a chemical structure selected in steps (d) and (e), and testing the compound for the ability to decrease an activity mediated by the receptor.
- 10 39. A method as claimed in claim 38 wherein the test is carried out *in vitro*.
40. A method as claimed in claim 39 wherein the *in vitro* test is a high throughput assay.
- 15 41. A method as claimed in claim 38 wherein the test is carried out *in vivo*.
42. A method as claimed in any one of claims 1 to 41 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than 10⁻⁶M.
- 20 43. A method as claimed in any one of claims 1 to 41 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than 10⁻⁸M
- 25 44. A method as claimed in any one of claims 1 to 41 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than 10⁻⁹M.
- 30 45. A method as claimed in any one of claims 1 to 44 wherein the compound is selected or modified from a known compound identified from a data base.
46. A method as claimed in any one of claims 1 to 45 wherein the method is used to identify potential compounds which have the ability to decrease an activity mediated by the receptor.
- 35

47. A computer for producing a three-dimensional representation of a molecule or molecular complex, wherein the computer comprises:

- 5 (a) a machine-readable data storage medium comprising a data storage material encoded with machine-readable data, wherein the machine readable data comprise the atomic coordinates of amino acids 1-501 of the EGF receptor molecule as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or one or more subsets of said amino acids, or one or
- 10 more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations;
- 15 (b) a working memory for storing instructions for processing the machine-readable data;
- (c) a central-processing unit coupled to the working memory and to the machine-readable data storage medium, for processing the machine-readable data into the three dimensional representation; and
- 20 (d) an output hardware coupled to the central processing unit, for receiving the three-dimensional representation.

48. A computer as claimed in claim 47 wherein the subset of amino acids are the amino acids (i) defining either or both the ligand binding surface(s), or (ii) defining dimerization interface.

25

49. A compound able to interact with a member of the EGF receptor family and to modulate an activity mediated by the receptor, the compound being obtained by a method according to any one of claims 1 to 46.

30

50. A compound as claimed in claim 49 which is a mutant of the natural ligand of a receptor of the EGF receptor family, where at least one mutation occurs in the region of the natural ligand which interacts with the receptor.

35

51. A pharmaceutical composition for preventing or treating a disease associated with signaling by a molecule of the EGF receptor family which

comprises a compound according to claim 49 or claim 50 and a pharmaceutically acceptable carrier or diluent.

52. A method of preventing or treating a disease associated with signaling by a molecule of the EGF receptor family which method comprises administering to a subject in need thereof a compound identified by a method comprising the step of the step of assessing the stereochemical complementarity between the compound and a topographic region of the receptor, wherein the receptor is characterised by:-

- 10 (i) amino acids 1-501 of the EGF receptor positioned at atomic coordinates as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å;
- 15 (ii) one or more subsets of said amino acids related to the coordinates shown in Appendix I or Appendix II by whole body translations and/or rotations; or
- 20 (iii) amino acids present in the amino acid sequence of a member of the EGF receptor family, which form an equivalent three-dimensional structure to that of amino acids 1-501 of the EGF receptor positioned at atomic coordinates substantially as shown in Appendix I or Appendix II, or structural coordinates having a root mean square deviation from the backbone atoms of said amino acids of not more than 1.5Å, or a subset thereof.

25 53. A method as claimed in claim 52 wherein the receptor is EGFR and the topographic region of EGFR is the ligand binding surface defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and
30 467.

54. A method as claimed in claim 53 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding surface of EGFR defined by amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89,
35 90, 98, 99, 101-103, 125, 127 and 128, and/or the ligand binding surface of

EGFR defined by amino acids 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467.

55. A method as claimed in claim 52 wherein the receptor is ErbB-2 and the topographic region of ErbB2 is the surface defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135 and 136, and/or the surface defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475.
56. A method as claimed in claim 55 wherein the compound is selected or designed to have portions that match residues positioned on the surface of ErbB2 defined by amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135 and 136, and/or the surface of ErbB2 defined by amino acids 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475.

57. A method as claimed in claim 52 wherein the receptor is ErbB-3 and the topographic region of ErbB-3 is the ligand binding surface defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

58. A method as claimed in claim 57 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding surface of ErbB-3 defined by amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131 and 132, and/or the ligand binding surface of ErbB-3 defined by amino acids 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466.

59. A method as claimed in claim 52 wherein the receptor is ErbB-4 and the topographic region of ErbB-4 is the ligand binding surface defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, and/or the ligand binding surface defined by amino acids 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

60. A method as claimed in claim 59 wherein the compound is selected or designed to have portions that match residues positioned on the ligand binding surface of ErbB-4 defined by amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, and/or the ligand binding surface of ErbB-4 defined by amino acids 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468.

61. A method as claimed in claim 52 wherein the compound is selected or designed to interact with a site within 5 Å of atomic positions of the EGF receptor listed in Appendices III or IV or corresponding regions of other members of the EGF receptor family, such that the compound interferes allosterically with the binding of a natural ligand to a member of the EGF receptor family.

62. A method as claimed in claim 52 wherein the receptor is EGFR and the topographic region of the EGFR to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287.

63. A method as claimed in claim 62 wherein the compound is selected or designed to have portions that match residues positioned on the dimer interface of EGFR defined by amino acids 38, 86, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318 and/or the dimer interface defined by amino acids 86, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-280 and 282-287 .

64. A method as claimed in claim 52 wherein the receptor is ErbB-2 and the topographic region of the ErbB-2 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 36, 84, 202, 203, 211, 212, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326 and/or the dimer interface defined by amino acids

84, 201, 202, 211, 212, 236, 237, 246, 249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

65. A method as claimed in claim 64 which further comprises selecting or
5 designing a compound which has portions that match residues positioned on the dimer interface of ErbB-2 defined by amino acids 36, 84, 202, 203, 211, 212, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326 and/or the dimer interface defined by amino acids 84, 201, 202, 211, 212, 236, 237, 246, 249, 251-253, 255-260, 269-272, 282, 285-287 and 289-294.

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66. A method as claimed in claim 52 wherein the receptor is ErbB-3 and the topographic region of the ErbB-3 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 41, 89, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275,
15 278-279, 281-287 and 317 and/or the dimer interface defined by amino acids 89, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-279 and 281-286.

67. A method as claimed in claim 66 which further comprises selecting or
20 designing a compound which has portions that match residues positioned on the dimer interface of ErbB-3 defined by amino acids 41, 89, 194, 195, 204, 205, 230, 239, 242-246, 248-253, 262-265, 275, 278-279, 281-287 and 317 and/or the dimer interface defined by amino acids 89, 193, 194, 204, 205, 229, 230, 239, 242, 244-246, 248-253, 262-265, 275, 278-279 and 281-286.

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68. A method as claimed in claim 52 wherein the receptor is ErbB-4 and the topographic region of the ErbB-4 to which the compound, or a portion thereof, has stereochemical complementarity is the dimer interface defined by amino acids 40, 88, 196, 197, 206, 207, 232, 241, 244-248, 250-255, 264-267, 277,
30 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids 88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277, 280-281 and 283-286.

69. A method as claimed in claim 68 which further comprises selecting or
35 designing a compound which has portions that match residues positioned on the dimer interface of ErbB-4 defined by amino acids 40, 88, 196, 197, 206,

207, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289 and 319 and/or the dimer interface defined by amino acids 88, 195, 196, 206, 207, 231, 232, 241, 244, 246-248, 250-255, 264-267, 277, 280-281 and 283-286.

- 5 70. A method as claimed in any one of claims 62 to 69 wherein the compound is designed or selected to comprise a first domain which interacts with the dimer interface of a first EGF receptor family member and a second domain which interacts with the dimer interface of a second EGF receptor family member.

10

71. A method as claimed in any one of claims 52 to 70 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than $10^{-6}M$.

- 15 72. A method as claimed in any one of claims 52 to 71 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than $10^{-8}M$

20 73. A method as claimed in any one of claims 52 to 72 wherein the stereochemical complementarity between the compound and the receptor is such that the compound has a K_d for the receptor site of less than $10^{-9}M$.

25 74. A method as claimed in any one of claims 52 to 73 wherein the compound is selected or modified from a known compound identified from a data base.

75. A method as claimed in any one of claims 52 to 74 wherein the disease is selected from the group consisting of psoriasis and tumour states.

- 30 76. A method as claimed in claim 75 wherein the tumour state is selected from the group consisting of cancer of the breast, brain, colon, prostate, ovary, cervix, pancreas, lung, head and neck, and melanoma, rhabdomyosarcoma, mesothelioma, squamous carcinomas of the skin and glioblastoma.

35 77. A method for evaluating the ability of a chemical entity to bind to EGFR, said method comprising the steps of:

- 5 (a) creating a computer model of at least one region of EGFR using structure coordinates wherein the root mean square deviation between said structure coordinates and the structure coordinates of amino acids 1-501 of EGFR as set forth in Appendix I or Appendix II is not more than about 1.5 Å;
- (b) employing computational means to perform a fitting operation between the chemical entity and said computer model of the binding surface; and
- 10 (c) analysing the results of said fitting operation to quantify the association between the chemical entity and the binding surface model.

78. A method of utilizing molecular replacement to obtain structural information about a molecule or a molecular complex of unknown structure, comprising the steps of:
- 15 (i) crystallising said molecule or molecular complex;
- (ii) generating an X-ray diffraction pattern from said crystallized molecule or molecular complex;
- 20 (iii) applying at least a portion of the structure coordinates set forth in Appendix I or Appendix II to the X-ray diffraction pattern to generate a three-dimensional electron density map of at least a portion of the molecule or molecular complex whose structure is unknown.

79. A crystalline composition comprising amino acids 1-501 of the EGF receptor or a portion thereof.
- 25

80. A method of assessing the interaction between a compound and the EGF receptor, the method comprising exposing a crystalline composition comprising amino acids 1-501 of the EGF receptor or a portion thereof to the compound and measuring the level of binding to the crystal.
- 30

81. A polypeptide complex in a crystallized form comprising the amino acids 1-501 of EGFR and TGF α .

- 35 82. A variant of a ligand of the EGF receptor family in which the sequence of the ligand is modified such that the ability to interact with the L1 domain of the

member of the EGF receptor family is retained or increased and the ability to interact with the L2 domain of the member of the EGF receptor family is removed or decreased, or *vice versa*.

- 5 83. A variant of a ligand of the EGF receptor family in which the sequence of the ligand is modified such that the ability to interact with the L1 domain of a member of the EGF receptor family is retained or increased and the ability to interact with the L2 domain of a member of the EGF receptor family is retained or increased, with the proviso that the binding to at least one of L1 or L2 is
10 increased.

- 84 A variant as claimed in claim 82 or claim 83 in which the ligand is selected from the group consisting of EGF, TGF- α , amphiregulin, HB-EGF, betacellulin, epiregulin, epigen, NRG1 α , NRG1 β , NRG2 α , NRG β , NRG3 and
15 NRG4.

85. A variant as claimed in claim 84 wherein the ligand is TGF α .

86. A TGF α variant as claimed in claim 85 wherein the TGF α is modified at
20 one more amino acids selected from the group consisting of amino acids 3-5, 8, 9, 11-15, 17, 18, 22, 24, 26, 27, 29-34, 36 and 38-50.

87. An extracellular fragment of EGFR, wherein the fragment is modified at one or more amino acids selected from the group consisting of
25 (i) amino acids 11-18, 20, 22, 26, 29, 30, 45, 69, 89, 90, 98, 99, 101, 103, 125, 127, 128, 325, 346, 348-350, 353-358, 382, 384, 408, 409, 411, 412, 415, 417, 418, 438, 440, 465 and 467, or
(ii) amino acids 38, 86, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-280, 282-288 and 318,
30 wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

88. An extracellular fragment of ErbB-2, wherein the fragment is modified at one or more amino acids selected from the group consisting of

- (i) amino acids 9-16, 18, 20, 24, 27, 28, 43, 67, 87, 88, 96, 97, 99-101, 133, 135, 136, 333, 354, 359-358, 361-366, 390, 392, 416, 417, 419, 420, 423, 425, 426, 446, 448, 473 and 475, or
- (ii) amino acids 36, 84, 201-203, 211, 212, 236, 237, 246, 249-253, 255-260, 269-272, 282, 285-287, 289-295 and 326.

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

89. An extracellular fragment of ErbB-3, wherein the fragment is modified at one or more amino acids selected from the group consisting of

- (i) amino acids 14-21, 23, 25, 29, 32, 33, 48, 72, 92, 93, 101, 102, 104-106, 129, 131, 132, 322, 343, 345-347, 350-355, 379, 381, 405, 406, 408, 409, 412, 414, 415, 436, 438, 464 and 466, or
- (ii) amino acids 41, 89, 193-195, 204, 205, 229, 230, 239, 242-246, 248-253, 262-265, 275, 278-279, 281-287, 317.

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

90. An extracellular fragment of ErbB-4, wherein the fragment is modified at one or more amino acids selected from the group consisting of

- (i) amino acids 13-20, 22, 24, 28, 31, 32, 47, 71, 91, 92, 100, 101, 103-105, 128, 130, 131, 326, 347, 349-351, 354-359, 383, 385, 409, 410, 411, 412, 415, 417, 418, 439, 441, 466 and 468, or
- (ii) amino acids 40, 88, 195-197, 206, 207, 231, 232, 241, 244-248, 250-255, 264-267, 277, 280-281, 283-289 and 319.

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

91. An extracellular fragment of EGFR wherein the fragment is modified at one or more amino acids of EGFR selected from the group consisting of:

- (i) amino acids 5, 6, 8-10, 19, 21-25, 28, 32, 33, 38, 39, 40, 42, 44, 47, 48, 50, 63, 64, 66, 68, 71, 73, 87, 88, 91-94, 96, 104-107, 109, 123, 130, 131, 151-160, 315-324, 326, 328, 329, 331, 332, 343, 344, 351, 359-363, 379, 380, 385, 387, 388, 394, 404-407, 410, 413, 420, 434-436, 440, 441, 443, 448, 449, 461-464, 466-468; or

(ii) amino acids 1-6, 8,9, 11, 30, 35, 36, 39, 40, 60, 62-64, 82, 84, 85, 87-89, 94, 118, 120-122, 148, 187-193, 196-198, 200-203, 209-211, 213, 215, 217-221, 231-233, 235, 237, 238, 241, 243, 244, 247, 254-261, 266, 268-270, 272-274, 276, 277, 281, 289-297, 299-301, 303, 304, 311, 312, 314-317, 319-323, 335, 340, 342-344, 346, 376, 378-380, 403-412, 434, 459,

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

92. An extracellular fragment of ErbB-2 wherein the fragment is modified at one or more amino acids of ErbB-2 selected from the group consisting of:

(i) amino acids 3,4, 6-8, 17, 19-23, 26, 30, 31, 36, 37, 38, 40, 42, 45, 46, 48, 61, 62, 64, 66, 69, 71, 85, 86, 89-92, 94, 102-115, 117, 131, 138, 139, 159-168, 323-323, 334, 336, 337, 339, 340, 351, 352, 359, 367-371, 387, 388, 393, 395, 397, 402, 412-415, 418, 421, 428, 442-444, 448, 449, 451, 456, 457, 469-472, and 472-476, or

(ii) amino acids 1-4, 6, 7, 9, 28, 33, 34, 37, 38, 58, 60-62, 80, 82, 83, 85-87, 92, 126, 128-130, 156, 195-201, 204-206, 208-211, 217-219, 221, 223, 225-229, 239-241, 243, 245, 246, 249, 251, 252, 255, 262-269, 274, 276-278, 280-282, 284, 285, 289, 297-305, 307-309, 311, 312, 319, 320, 322-325, 327-231, 343, 348, 350-352, 354, 384, 386-388, 411-420, 442, and 467,

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

25

93. An extracellular fragment of ErbB-3 wherein the fragment is modified at one or more amino acids of ErbB-3 selected from the group consisting of:

(i) amino acids 8, 9, 11-13, 22, 24-28, 31, 35, 36, 41, 42, 43, 45, 47, 50, 51, 53, 66, 67, 69, 71, 74, 76, 90, 91, 94-97, 99, 107-111, 113, 127, 134, 135, 154-159, 314-321, 323, 325, 326, 328, 329, 340, 341, 348, 356-360, 376, 373, 382, 384, 385, 391, 401-404, 407, 410, 418, 432-434, 438, 439, 441, 446, 447, 459-462, and 464-466, or

(ii) amino acids 4-9, 11, 12, 14, 33, 38, 39, 42, 43, 63, 65-67, 85, 87, 88, 90-92, 97, 122, 124-126, 152, 187-193, 196-198, 200-203, 209-211, 213, 215, 217-221, 231-233, 235, 237, 238, 241, 243, 244, 247, 254-261, 266, 268-270, 272-274, 276, 277, 280, 288-296, 298-300, 302, 303, 310,

311, 313-316, 318-320, 332, 337, 339-341, 343, 373, 375-377, 400-409, 432 and 457,

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

5

94. An extracellular fragment of ErbB-4 wherein the fragment is modified at one or more amino acids of ErbB-4 selected from the group consisting of:

- (i) amino acids 7, 8, 10-12, 21, 23-27, 30, 34, 35, 40, 41, 42, 44, 46, 49, 50, 52, 65, 66, 68, 70, 73, 75, 89, 90, 93-96, 98, 106-110, 112, 126, 133, 10 134, 154-163, 316-325, 327, 329, 330, 332, 333, 344, 345, 352, 360-364, 380, 381, 386, 388, 389, 395, 405-408, 413, 421, 435-437, 441, 442, 444, 449, 450, 462-465 and 467-469 or
- (ii) amino acids 3-8, 10, 11 13, 32, 37, 38, 41, 42, 62, 64-66, 84, 86, 87, 89-91, 96, 121, 123-125, 151, 189-195, 198-200, 202-205, 207-213, 215, 15 217, 219-223, 233-235, 237, 239, 240, 243, 245, 246, 249, 256-263, 268, 270-272, 274-276, 278, 279, 282, 290-298, 300-302, 304, 305, 312, 313, 315-318, 320-324, 336, 341, 343-345, 347, 377, 379-381, 404-412, 435 and 460

wherein the modification increases the affinity of the fragment for one or more of its natural ligands when compared to the unmodified fragment.

20

95. A compound comprising fragment 1-501 of EGFR or an equivalent fragment of a member of the EGF receptor family, wherein the fragment is modified to induce dimerisation of the fragment in back-to-back configuration.

25

96. A compound as claimed in claim 95 wherein the modification is made to a residue of the fragment which forms part of the back-to-back dimer interface.

97. A compound as claimed in claim 96 wherein the modification involves substitution of at least one residue which forms part of the back to back dimer with a cysteine residue.

30

98. A compound comprising fragment 1-501 of EGFR wherein the fragment comprises the substitution P248C and/or A265C.

35

99. A compound comprising fragment 1-501 of EGFR wherein the fragment comprises the substitution D279C.

100. A compound as claimed in claim 95 wherein the modification involves
5 insertion of a dimerization sequence into the fragment.

101. A compound as claimed in claim 100 wherein the dimerization sequence is inserted between residues 194 and 195 or between residues 204 and 205 of EGFR or equivalent residues of another member of the EGF receptor family.

10

102. A compound as claimed in any one of claims 95 to 101 wherein the fragment is conjugated to a molecule.

103. A compound as claimed in claim 102 wherein the molecule is a constant
15 domain of an immunoglobulin molecule.

104. An antibody which binds to EGFR, the antibody being directed against (i) EGFR residues 100-108, 315-327 or 353-362; or (ii) EGFR residues 190-207, 240-305 or parts thereof.

20

105. An antibody which binds to ErbB-2, the antibody being directed against (i) ErbB-2 residues 98-116, 323-335 or 361-374; or (ii) ErbB-2 residues 198-214, 247-313 or parts thereof.

25 106. An antibody which binds to ErbB-3, the antibody being directed against (i) ErbB-3 residues 103-112, 314-324 or 350-363; or (ii) ErbB-3 residues 190-207, 240-304 or parts thereof.

107. An antibody which binds to ErbB-4, the antibody being directed against
30 (i) ErbB-4 residues 102-111, 316-328, 354-367; or (ii) ErbB-4 residues 192-209, 242-306 or parts thereof.

Table 1 Summary of crystallographic data

Data set	Resolution (Å)	Mean I/s	R _{merge} [*]	Completeness (%) (Multiplicity)	No of sites	R _{Cullis} [†]	Phasing Power [‡]	f.o.m. [§]
Native	2.9	11.1	0.129	96.9 (2.78)				0.31/0.84
Pt(NO ₃) ₂	2.8	11.9	0.095	97.8 (3.85)	4	0.71	0.71	
PIP	2.5	10.8	0.075	90.2 (3.17)	2	0.91	0.91	
K ₂ Au(CN) ₂	3.0	9.1	0.091	97.8 (3.43)	4	0.21	2.21	
Refinement Resolution (Å)	No. of reflections (free)	No. of atoms	R _{cryst} [#]	R _{free} [#]	Bonds [¶] (Å)	Angles [¶] (°)		
20-2.5	48006 (2379)	8687	0.237	0.289	0.007	1.50		

PIP, di-μ-iodobis(ethylenediamine)diplatinum nitrate (Unit cell $a = 52.02$ Å, $b = 198.17$ Å, $c = 78.43$ Å, $\beta = 102.95^\circ$)

^{*} $R_{\text{merge}} = \sum_h \sum_j |I_{h,j} - I_h| / \sum_h \sum_j I_h$, where $I_{h,j}$ is an intensity measurement j and I_h is the mean for a reflection h .

[†] $R_{\text{Cullis}} = \sum_h |F_{\text{PH}} - F_P| - |F_{\text{Hcalc}}| / \sum_h |F_{\text{PH}}| - |F_P|$, where F_{PH} , F_P and F_{Hcalc} are, respectively, derivative, native and heavy atom structure factors for centric reflection h .

[‡] Phasing power = $\sum_h |F_{\text{Hcalc}}| / \sum_h \epsilon$, where F_{Hcalc} is defined above and ϵ is the lack of closure.

[§] f.o.m.(figure of merit) = $\langle \cos(\Delta\alpha_h) \rangle$, where $\Delta\alpha_h$ is the error in the phase angle for reflection h . Values are given before and after density modification.

[#] R_{cryst} and R_{free} are defined in .

[¶] R.m.s. deviation for bond distances and angles.

EGFR	---LEKKVCQGTSNKLTQLGTFFEDHFLSLQRMFNCEVVLGNLEITYVQRNYDLSFLKTIQEVAGYVLIALNTVERIP	76
ErbB-2	-----STQVCTGTDMLRLPASPETHDMLRLHYQGCQVQGNLELTYPFTNASLSFLQDIEVGYVLIAHNQVRQVP	74
ErbB-3	SEVGNQAVCPGTINGLSVTGDAENQYQTLTKLYERCEVVMGNLEIVLTGHNADLSFLQWIREVTGYVLVAMNEFSTLP	79
ErbB-4	-QPSDSQSVACGTENKLSLSLEQYRALRKYYENCEVVMGNLEITSIEHNRLSFLRSVREVTGYVLVALNQFRYLE	78
EGFR	LENLQIIRGNMYENSIALAVLSNYDAN-----KTGLKELPMRNLQELHGAVERFSNNPALCNVESIQWRDIVS	145
ErbB-2	LQRLRVRTGTLFEDNYALAVLDNGDPLNNTTPVTGASPGGLRELQRLTEILKGGVLIQRNPQLCYQDTILWKDIFH	153
ErbB-3	LPNLRVVRGTQVYDGKEAIFVMLNYNTNS-----SHALRQLRLTQLTEILSGGVYIEKNDKLCHEMDTIDWRDIVR	149
ErbB-4	LENLRIIRGTLKLYEDRYALAIIFLNYRKDG-----NFGLOELGLKNLTLEILNGGVYVDQNKFLCYADTIHWQDIVR	148
EGFR	SDFLSNMSMDFQNHLSGCQKCDPSCPNGSCWGAENECQKLTKIIICAQCCSGRCRGKSPSDCCHNQCAAGCTGPRESDC	224
ErbB-2	KNNQLALTLIDTNRSRACHPCSPMCKGSRWGESSEDCQSLRTRTVCAAGCA-RCKGPLPTDCCHEQCAAGCTGPKHSDC	231
ErbB-3	DRDA-EIVVKD-NG-RSCPPECHEVCKG-RCWGPSEDCQTLTKTICAPQCNHCFGNPNQCCHDECAGGCSGPQDTDC	224
ErbB-4	NPWPSNLTLVSTNGSSGCGRCHKSKCTG-RCWGPTEHNCQTLTRTVCAEQCDGRCYGPYVSDCCCHRECAGGCSGPKDTDC	226
EGFR	LVCRKFRDEATCKDTCPPLMLYNPTTYQMDVNPEGKYSFGATCVKKCPRNVVVTDHGSCVVRACGADSYEMEED-GVRKC	302
ErbB-2	LACLHENHSGICELHCPALVNTYNTDTFESMPNPEGRYTFGASCVTACPNYLSTDVGSCCTLVCPLHNQEVTAEDGTQRC	310
ErbB-3	FACRHENDSGACVPRCPQPLVYNKLTFTQLEPNHTKYQYGGVCVASCPHNFVDO-TSCVRACPPDKMEVDKN-GLKMC	301
ErbB-4	FACMNFENDSGACVTQCPQTFVYNPTTFQLEHNENAKYTYGAFVCVKKCPHNFVDS-SSCVRACPPSSKMEVEEN-GIKMC	303
EGFR	KKCEGPCRKVCNIGIGIGEFDKDSLSINATNIKHFKNCTSISGDLHLIPVAFRGDSFTHTPPPLDPQELDILKTVKEITGFL	381
ErbB-2	EKCSKPCARVCYGLGMEHLREVRAVTSANIQEEFAGCKIFGSLAFLPESFDGDPASNTAPIQPEQLQVFEETLEEITGYL	389
ErbB-3	EPCGGLCPKACEGTGS--GSRFQTVDSNIDGFVNCCTKIILGNLDFLITGLNGDPWHKIPALDPEKLNVRTVREITGYL	378
ErbB-4	KPCTDIPCACDGI GTGSLMSAQTVDSNIDKFINCTKINGNLI FLVTGIHGDPYNAIEAIDPEKLNVRTVREITGFL	382
EGFR	LIQAWPENRTDLHAFENLEIIRGRTKQHGFSLAVSL-NITSLGLRSLKEISDGVIIISGNKNLCYANTINWKKLFGT	459
ErbB-2	YISAWPDSLPLDSVFQNLQVIRGRILHNGAYSITLQGL-GISWLGRLSRLRELSGGLIHHNTHLCFVHTVPWDQLFRN	467
ErbB-3	NIQSWPPHMHNFVSFNLTTIGGRSLYNRGFSLLIMKNLNVTSIGFRSLKEISAGRIYISANRQLCYHHSNLNWKVLRG	457
ErbB-4	NIQSWPPNMTDFSVFSLNLTIGGRVLYS-GLSLILLKQOGITSIQFQSLKEISAGNIYITDNSNLCYYHTINWTTLFST	460
EGFR	S-GQKTKIISNRGENSCKATGQVCHALCSPEGCWGPEPRDCVS	501
ErbB-2	P-HQALLHTANRPEDECVGEGLACHQLCARGHCWGPPTQCVN	509
ErbB-3	PTEERLDIKHNRPRRDCVAEGKVCDFLCSSGGCWGPGGQCLS	500
ErbB-4	I-NQRIVIRDNRKAENCTAEGMVCNHLCLSSDGCWGPGPDQCLS	502

Figure 1

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EGF	NSDSECLSHDGYCLHDGYCMYIEA---LDKYACNCVVGYIGERCQYRDLKWWEIR
TGF- α	VVSHFNDCPDSTQFCFH-GTCRFLVQ---EDKPACVCHSGYVGARCEHADLLAVV
Amphiregulin	KKKNPCNAEFQNFCH-GECKYIEH---LEAVTCKCQQYFFGERCGEK
HB-EGF	KKRDPCLRKYKDFCH-GECKYVKE---LRAPSCICHPGYHGERCHGLSLPVEN
Betacellulin	GHFSRCPKQYKHYCIK-GRCRFVVA---EQTPSCVCDGYIGARCEVDFLYLR
Epiregulin	VSITKCSSDMNGYCLH-GQCIYLVLD---MSQNYCRCEVGYTGVRCEHFFLTVHQ
Epigen	KFSHPCLEDHNSYCIN-GACAFHHE---LKQAIACRCFTGYTGQRCFHLTLTSYA
NRG1 α	SHLVKCAEKEKTFVCVNGGECFMVKDLSNPSRYLCKCQPGFTGARCTENVPMKV
NRG1 β	SHLVKCAEKEKTFVCVNGGECFMVKDLSNPSRYLCKCQPGFTGDRCQNYVMASF
NRG2 α	GHARKCNETAKSYCVNGGVYCYIE---GINQLSCKCPNGFFGQRCLEKLPRL
NRG2 β	GHARKCNETAKSYCVNGGVYCYIE---GINQLSCKCPVGYTGDRCCQFAMVNF
NRG3	EHFKPCRDKDLAYCLNDGECFVIE-TLTGSHKHCRCKEGYQGVRCDDQFLPKTD
NRG4	DHEQPCGPRHRSFCLNGGICYVIP---TIPSPFCRCIENYTGARCEEVFLPSS

Figure 2

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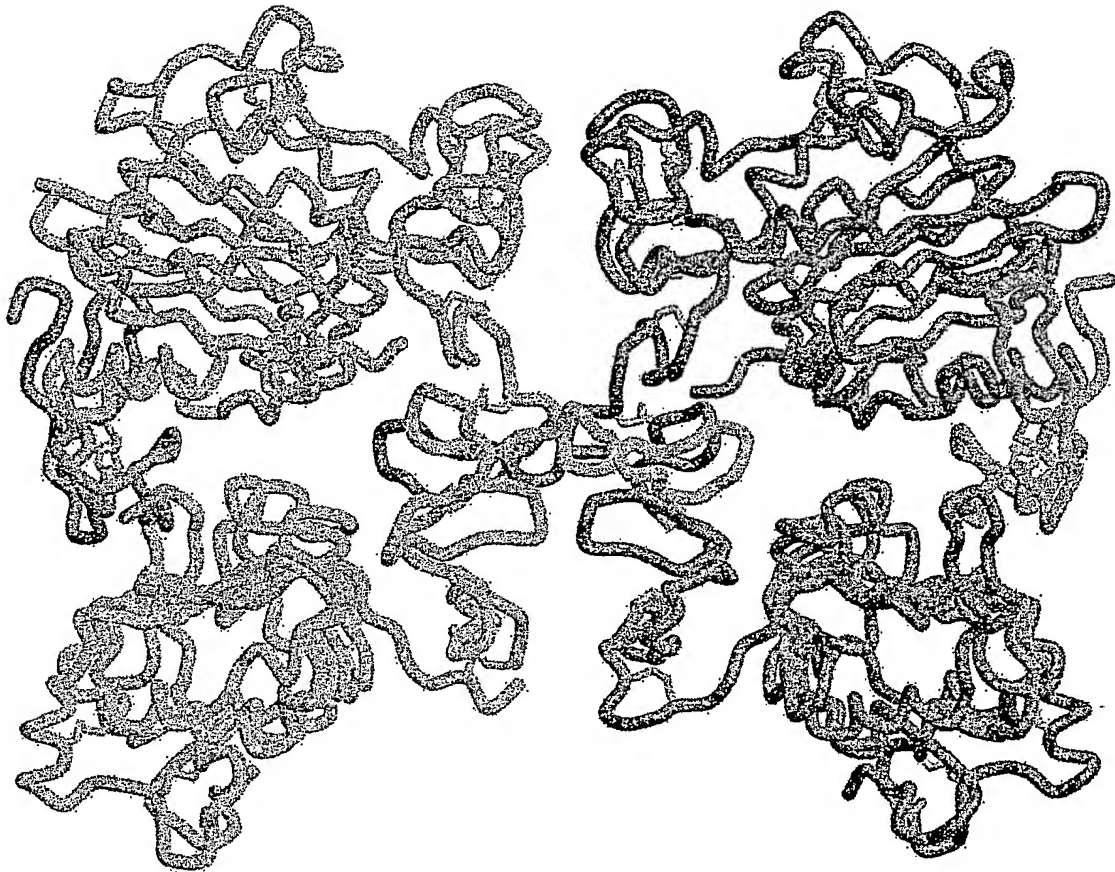


Figure 3

Figure 4A

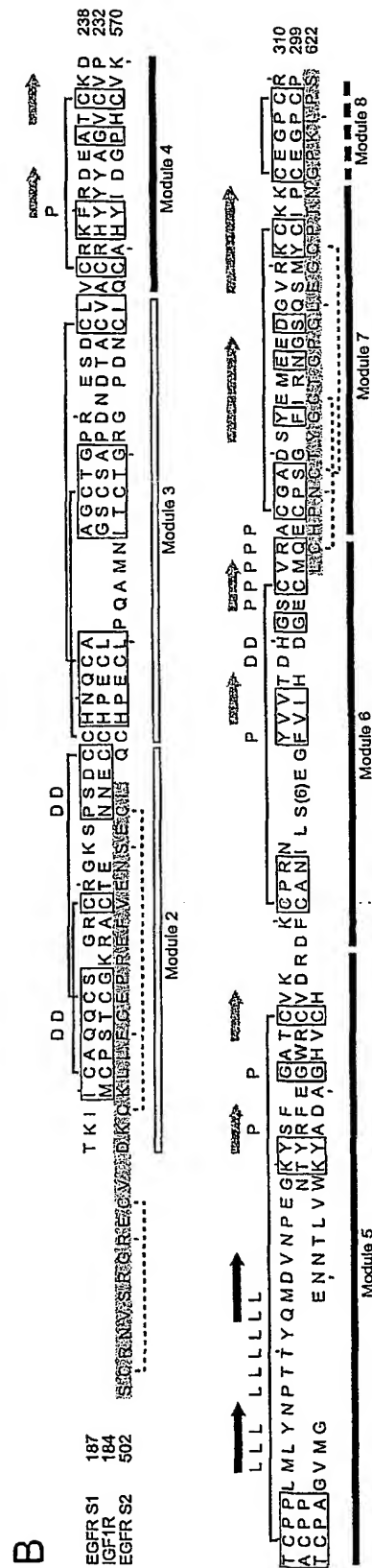


Figure 4B

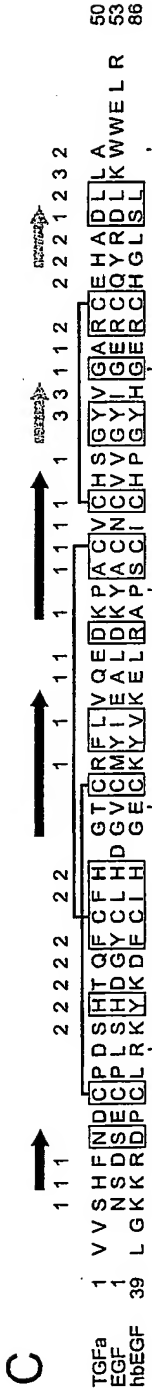


Figure 4C

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A

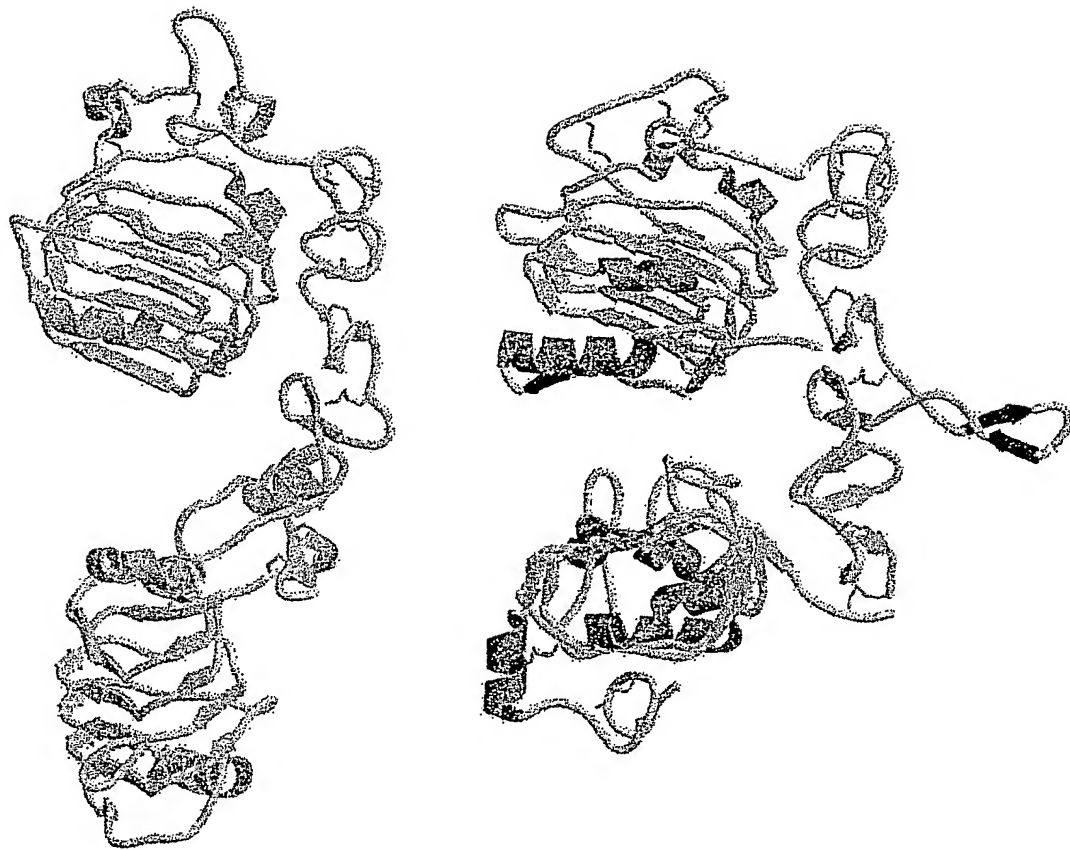


Figure 5

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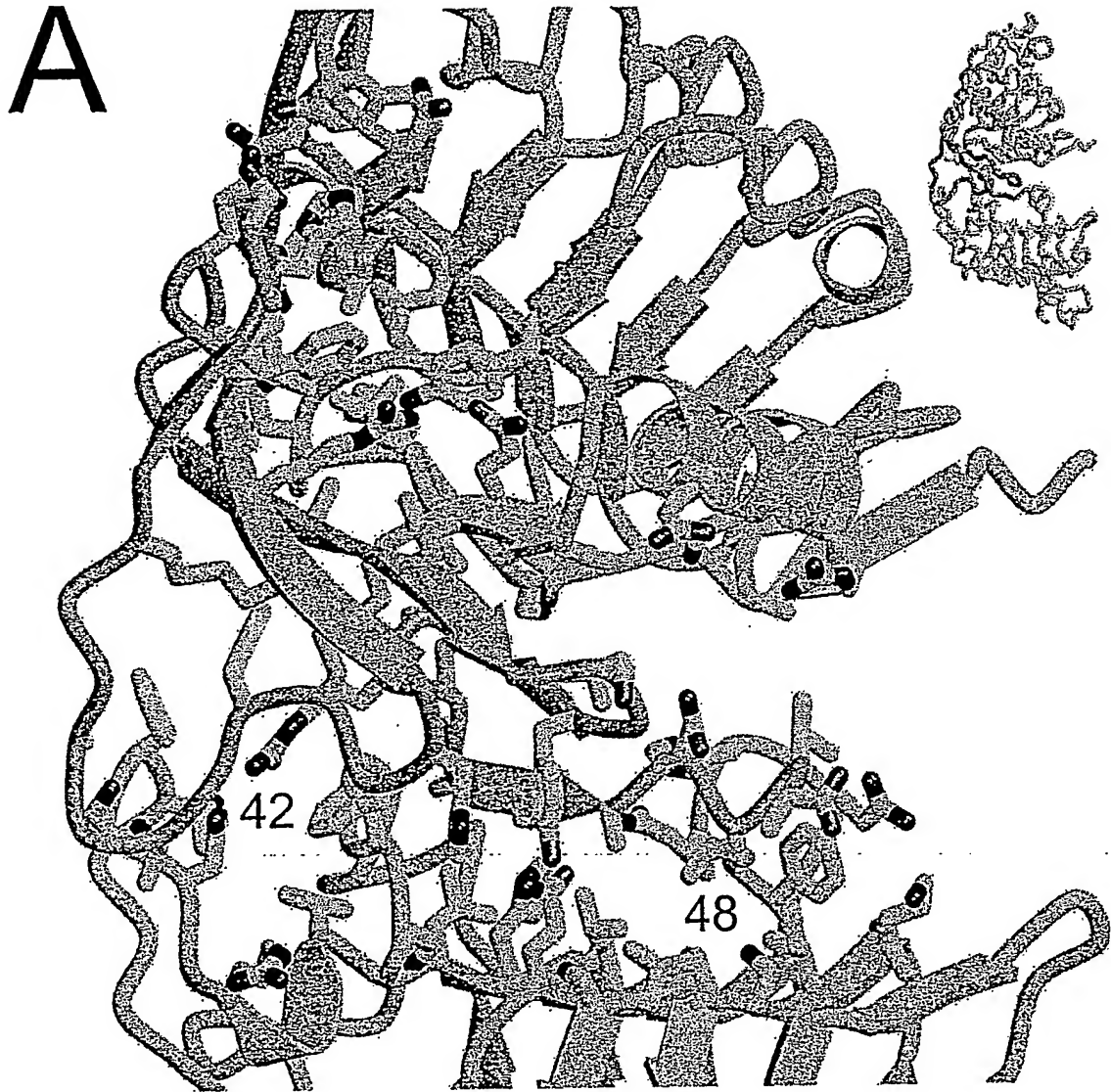


Figure 6

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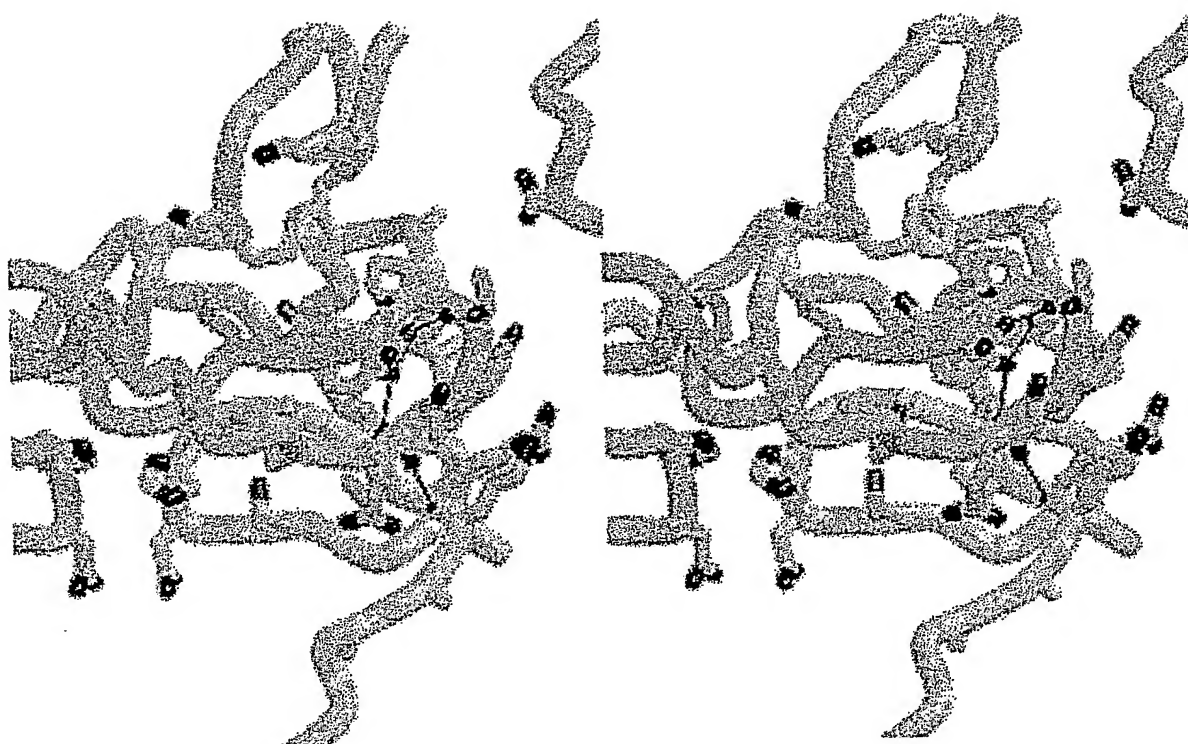


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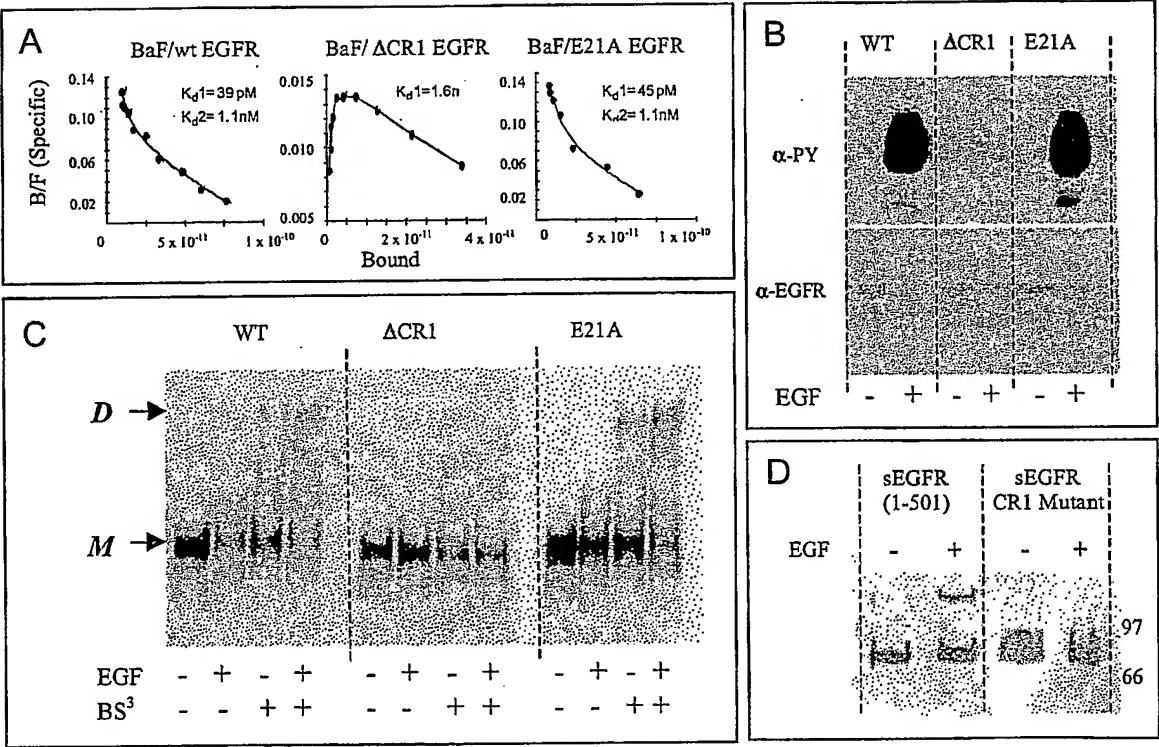


Figure 8

SEQUENCE LISTING

<110> Commonwealth Scientific and Industrial Research Organisation
 Ludwig Institute for Cancer Research
 Walter and Eliza Hall Institute of Medical Research
 Biomolecular Research Institute Limited

<120> Methods of screening based on the EGF receptor crsytal structure

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Gly Pro Lys His Ser Asp Cys Leu Ala Cys Leu His Phe Asn His Ser
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275

280

285

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Ser Leu Met Ser Ala Gln Thr Val Asp Ser Ser Asn Ile Asp Lys Phe
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Ile Asn Cys Thr Lys Ile Asn Gly Asn Leu Ile Phe Leu Val Thr Gly
 340 345 350

Ile His Gly Asp Pro Tyr Asn Ala Ile Glu Ala Ile Asp Pro Glu Lys
 355 360 365

Leu Asn Val Phe Arg Thr Val Arg Glu Ile Thr Gly Phe Leu Asn Ile
 370 375 380

Gln Ser Trp Pro Pro Asn Met Thr Asp Phe Ser Val Phe Ser Asn Leu
 385 390 395 400

Val Thr Ile Gly Gly Arg Val Leu Tyr Ser Gly Leu Ser Leu Leu Ile
 405 410 415

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Leu Lys Gln Gln Gly Ile Thr Ser Leu Gln Phe Gln Ser Leu Lys Glu
 420 425 430

Ile Ser Ala Gly Asn Ile Tyr Ile Thr Asp Asn Ser Asn Leu Cys Tyr
 435 440 445

Tyr His Thr Ile Asn Trp Thr Thr Leu Phe Ser Thr Ile Asn Gln Arg
 450 455 460

Ile Val Ile Arg Asp Asn Arg Lys Ala Glu Asn Cys Thr Ala Glu Gly
 465 470 475 480

Met Val Cys Asn His Leu Cys Ser Ser Asp Gly Cys Trp Gly Pro Gly
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Pro Asp Gln Cys Leu Ser
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Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
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Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
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Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys
 35 40 45

Trp Trp Glu Leu Arg
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Val Val Ser His Phe Asn Asp Cys Pro Asp Ser His Thr Gln Phe Cys
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Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Asp Lys Pro Ala Cys
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Val Cys His Ser Gly Tyr Val Gly Ala Arg Cys Glu His Ala Asp Leu
35 40 45

Leu Ala Val Val
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Lys Lys Lys Asn Pro Cys Asn Ala Glu Phe Gln Asn Phe Cys Ile His
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Gly Glu Cys Lys Tyr Ile Glu His Leu Glu Ala Val Thr Cys Lys Cys
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Gln Gln Glu Tyr Phe Gly Glu Arg Cys Gly Glu Lys
35 40

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Lys Lys Arg Asp Pro Cys Leu Arg Lys Tyr Lys Asp Phe Cys Ile His
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Gly Glu Cys Lys Tyr Val Lys Glu Leu Arg Ala Pro Ser Cys Ile Cys
20 25 30

His Pro Gly Tyr His Gly Glu Arg Cys His Gly Leu Ser Leu Pro Val
35 40 45

Glu Asn
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Gly His Phe Ser Arg Cys Pro Lys Gln Tyr Lys His Tyr Cys Ile Lys
1 5 10 15

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Gly Arg Cys Arg Phe Val Val Ala Glu Gln Thr Pro Ser Cys Val Cys
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Asp Glu Gly Tyr Ile Gly Ala Arg Cys Glu Arg Val Asp Leu Phe Tyr
 35 40 45

Leu Arg
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Val Ser Ile Thr Lys Cys Ser Ser Asp Met Asn Gly Tyr Cys Leu His
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Gly Gln Cys Ile Tyr Leu Val Asp Met Ser Gln Asn Tyr Cys Arg Cys
 20 25 30

Glu Val Gly Tyr Thr Gly Val Arg Cys Glu His Phe Phe Leu Thr Val
 35 40 45

His Gln
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Lys Phe Ser His Pro Cys Leu Glu Asp His Asn Ser Tyr Cys Ile Asn
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Gly Ala Cys Ala Phe His His Glu Leu Lys Gln Ala Ile Cys Arg Cys
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Phe Thr Gly Tyr Thr Gly Gln Arg Cys Glu His Leu Thr Leu Thr Ser
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Tyr Ala
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13/21

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Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
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Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
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Leu Cys Lys Cys Gln Pro Gly Phe Thr Gly Ala Arg Cys Thr Glu Asn
 35 40 45

Val Pro Met Lys Val
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Ser His Leu Val Lys Cys Ala Glu Lys Glu Lys Thr Phe Cys Val Asn
 1 5 10 15

Gly Gly Glu Cys Phe Met Val Lys Asp Leu Ser Asn Pro Ser Arg Tyr
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Leu Cys Lys Cys Pro Asn Glu Phe Thr Gly Asp Arg Cys Gln Asn Tyr
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Val Met Ala Ser Phe
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Gly His Ala Arg Lys Cys Asn Glu Thr Ala Lys Ser Tyr Cys Val Asn
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Gly Gly Val Cys Tyr Tyr Ile Glu Gly Ile Asn Gln Leu Ser Cys Lys
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Cys Pro Asn Gly Phe Phe Gly Gln Arg Cys Leu Glu Lys Leu Pro Leu
 35 40 45

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Arg Leu
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Gly His Ala Arg Lys Cys Asn Glu Thr Ala Lys Ser Tyr Cys Val Asn
1 5 10 15

Gly Gly Val Cys Tyr Tyr Ile Glu Gly Ile Asn Gln Leu Ser Cys Lys
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Cys Pro Val Gly Tyr Thr Gly Asp Arg Cys Gln Gln Phe Ala Met Val
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Asn Phe
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Glu His Phe Lys Pro Cys Arg Asp Lys Asp Leu Ala Tyr Cys Leu Asn
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Asp Gly Glu Cys Phe Val Ile Glu Thr Leu Thr Gly Ser His Lys His
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Cys Arg Cys Lys Glu Gly Tyr Gln Gly Val Arg Cys Asp Gln Phe Leu
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Pro Lys Thr Asp
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Asp His Glu Gln Pro Cys Gly Pro Arg His Arg Ser Phe Cys Leu Asn
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Gly Gly Ile Cys Tyr Val Ile Pro Thr Ile Pro Ser Pro Phe Cys Arg
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Cys Ile Glu Asn Tyr Thr Gly Ala Arg Cys Glu Glu Val Phe Leu Pro
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Ser Ser
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Leu Gly Thr Phe Glu Asp His Phe Leu Ser Leu Gln Arg Met Phe Asn
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Asn Cys Glu Val Val Leu Gly Asn Leu Glu Ile Thr Tyr Val Gln Arg
 35 40 45

Asn Tyr Asp Leu Ser Phe Leu Lys Thr Ile Gln Glu Val Ala Gly Tyr
 50 55 60

Val Leu Ile Ala Leu Asn Thr Val Glu Arg Ile Pro Leu Glu Asn Leu
 65 70 75 80

Gln Ile Ile Arg Gly Asn Met Tyr Tyr Glu Asn Ser Tyr Ala Leu Ala
 85 90 95

Val Leu Ser Asn Tyr Asp Ala Asn Lys Thr Gly Leu Lys Glu Leu Pro
 100 105 110

Met Arg Asn Leu Gln Glu Ile Leu His Gly Ala Val Arg Phe Ser Asn
 115 120 125

Asn Pro Ala Leu Cys Asn Val Glu Ser Ile Gln Trp Arg Asp Ile Val
 130 135 140

Ser Ser Asp Phe Leu Ser Asn Met Ser Met Asp Phe Gln Asn His Leu
 145 150 155 160

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Gly Ser Cys Gln Lys Cys Asp Pro Ser Cys Pro Asn Gly Ser Cys Trp
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Gly Ala Gly Glu Glu Asn Cys Gln Lys Leu
 180 185

<210> 19
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Glu Ile Cys Gly Pro Gly Ile Asp Ile Arg Asn Asp Tyr Gln Gln Leu
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Lys Arg Leu Glu Asn Cys Thr Val Ile Glu Gly Tyr Leu His Ile Leu
 20 25 30

Leu Ile Ser Lys Ala Glu Asp Tyr Arg Ser Tyr Arg Phe Pro Lys Leu
 35 40 45

Thr Val Ile Thr Glu Tyr Leu Leu Leu Phe Arg Val Ala Gly Leu Glu
 50 55 60

Ser Leu Gly Asp Leu Phe Pro Asn Leu Thr Val Ile Arg Gly Trp Lys
 65 70 75 80

Leu Phe Tyr Asn Tyr Ala Leu Val Ile Phe Glu Met Thr Asn Leu Lys
 85 90 95

Asp Ile Gly Leu Tyr Asn Leu Arg Asn Ile Thr Arg Gly Ala Ile Arg
 100 105 110

Ile Glu Lys Asn Ala Asp Leu Cys Tyr Leu Ser Thr Val Asp Trp Ser
 115 120 125

Leu Ile Leu Asp Ala Val Ser Asn Asn Tyr Ile Val Gly Asn Lys Pro
 130 135 140

Pro Lys Glu Cys Gly Asp Leu Cys Pro Gly Thr Met Glu Glu Lys Pro
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Met Cys Glu Lys Thr Thr Ile Asn Asn Glu Tyr Asn Tyr Arg Cys Trp
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Thr Thr Asn Arg Cys Gln Lys
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Ile Asn Ile Arg Arg Gly Asn Asn Ile Ala Ser Glu Leu Glu Asn Phe
 35 40 45

Met Gly Leu Ile Glu Val Val Thr Gly Tyr Val Lys Ile Arg His Ser
 50 55 60

His Ala Leu Val Ser Leu Ser Phe Leu Lys Asn Leu Arg Leu Ile Leu
 65 70 75 80

Gly Glu Glu Gln Leu Glu Gly Asn Tyr Ser Phe Tyr Val Leu Asp Asn
 85 90 95

Gln Asn Leu Gln Gln Leu Trp Asp Trp Asp His Arg Asn Leu Thr Ile
 100 105 110

Lys Ala Gly Lys Met Tyr Phe Ala Phe Asn Pro Lys Leu Cys Val Ser
 115 120 125

Glu Ile Tyr Arg Met Glu Glu Val Thr Gly Thr Lys Gly Arg Gln Ser
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Lys Gly Asp Ile Asn Thr Arg Asn Asn Gly Glu Arg Ala Ser Cys Glu
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Ser

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Lys Val Cys Asn Gly Ile Gly Ile Gly Glu Phe Lys Asp Ser Leu Ser

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Ile	Asn	Ala	Thr	Asn	Ile	Lys	His	Phe	Lys	Asn	Cys	Thr	Ser	Ile	Ser		
			20					25					30				
Gly	Asp	Leu	His	Ile	Leu	Pro	Val	Ala	Phe	Arg	Gly	Asp	Ser	Phe	Thr		
		35					40					45					
His	Thr	Pro	Pro	Leu	Asp	Pro	Gln	Glu	Leu	Asp	Ile	Leu	Lys	Thr	Val		
	50					55					60						
Lys	Glu	Ile	Thr	Gly	Phe	Leu	Leu	Ile	Gln	Ala	Trp	Pro	Glu	Asn	Arg		
65					70					75					80		
Thr	Asp	Leu	His	Ala	Phe	Glu	Asn	Leu	Glu	Ile	Ile	Arg	Gly	Arg	Thr		
				85					90					95			
Lys	Gln	His	Gly	Gln	Phe	Ser	Leu	Ala	Val	Val	Ser	Leu	Asn	Ile	Thr		
			100					105					110				
Ser	Leu	Gly	Leu	Arg	Ser	Leu	Lys	Glu	Ile	Ser	Asp	Gly	Asp	Val	Ile		
		115					120					125					
Ile	Ser	Gly	Asn	Lys	Asn	Leu	Cys	Tyr	Ala	Asn	Thr	Ile	Asn	Trp	Lys		
	130					135					140						
Lys	Leu	Phe	Gly	Thr	Ser	Gly	Gln	Lys	Thr	Lys	Ile	Ile	Ser	Asn	Arg		
145					150					155					160		
Gly	Glu	Asn	Ser	Cys	Lys	Ala	Thr	Gly	Gln	Val	Cys	His	Ala	Leu	Cys		
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Ser Pro Ser Asp Cys Cys His Asn Gln Cys Ala Ala Gly Cys Thr Gly
20 25 30

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Pro Arg Glu Ser Asp Cys Leu Val Cys Arg Lys Phe Arg Asp Glu Ala
 35 40 45

Thr Cys Lys Asp Thr Cys Pro Pro Leu Met Leu Tyr Asn Pro Thr Thr
 50 55 60

Tyr Gln Met Asp Val Asn Pro Glu Gly Lys Tyr Ser Phe Gly Ala Thr
 65 70 75 80

Cys Val Lys Lys Cys Pro Arg Asn Tyr Val Val Thr Asp His Gly Ser
 85 90 95

Cys Val Arg Ala Cys Gly Ala Asp Ser Tyr Glu Met Glu Glu Asp Gly
 100 105 110

Val Arg Lys Cys Lys Lys Cys Glu Gly Pro Cys Arg
 115 120

<210> 23
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<400> 23

Met Cys Pro Ser Thr Cys Gly Lys Arg Ala Cys Thr Glu Asn Asn Glu
 1 5 10 15

Cys Cys His Pro Glu Cys Leu Gly Ser Cys Ser Ala Pro Asp Asn Asp
 20 25 30

Thr Ala Cys Val Ala Cys Arg His Tyr Tyr Tyr Ala Gly Val Cys Val
 35 40 45

Pro Ala Cys Pro Pro Asn Thr Tyr Arg Phe Glu Gly Trp Arg Cys Val
 50 55 60

Asp Arg Asp Phe Cys Ala Asn Ile Leu Ser Ala Glu Ser Ser Asp Ser
 65 70 75 80

Glu Gly Phe Val Ile His Asp Gly Glu Cys Met Gln Glu Cys Pro Ser
 85 90 95

Gly Phe Ile Arg Asn Gly Ser Gln Ser Met Tyr Cys Ile Pro Cys Glu
 100 105 110

Gly Pro Cys Pro

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<210> 24
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 <212> PRT
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Ser Cys Arg Asn Val Ser Arg Gly Arg Glu Cys Val Asp Lys Cys Lys
 1 5 10 15

Leu Leu Glu Gly Glu Pro Arg Glu Phe Val Glu Asn Ser Glu Cys Ile
 20 25 30

Gln Cys His Pro Glu Cys Leu Pro Gln Ala Met Asn Ile Thr Cys Thr
 35 40 45

Gly Arg Gly Pro Asp Asn Cys Ile Gln Cys Ala His Tyr Ile Asp Gly
 50 55 60

Pro His Cys Val Lys Thr Cys Pro Ala Gly Val Met Gly Glu Asn Asn
 65 70 75 80

Thr Leu Val Trp Lys Tyr Ala Asp Ala Gly His Val Cys His Leu Cys
 85 90 95

His Pro Asn Cys Thr Tyr Gly Cys Thr Gly Pro Gly Leu Glu Gly Cys
 100 105 110

Pro Thr Asn Gly Pro Lys Ile Pro Ser
 115 120

<210> 25
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 <213> Homo sapiens

<400> 25

Val Val Ser His Phe Asn Asp Cys Pro Asp Ser His Thr Gln Phe Cys
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Phe His Gly Thr Cys Arg Phe Leu Val Gln Glu Asp Lys Pro Ala Cys
 20 25 30

Val Cys His Ser Gly Tyr Val Gly Ala Arg Cys Glu His Ala Asp Leu
 35 40 45

Leu Ala
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<210> 26
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<213> Homo sapiens

<400> 26

Asn Ser Asp Ser Glu Cys Pro Leu Ser His Asp Gly Tyr Cys Leu His
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Asp Gly Val Cys Met Tyr Ile Glu Ala Leu Asp Lys Tyr Ala Cys Asn
20 25 30

Cys Val Val Gly Tyr Ile Gly Glu Arg Cys Gln Tyr Arg Asp Leu Lys
35 40 45

Trp Trp Glu Leu Arg
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<210> 27
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<212> PRT
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<400> 27

Leu Gly Lys Lys Arg Asp Pro Cys Leu Arg Lys Tyr Lys Asp Phe Cys
1 5 10 15

Ile His Gly Glu Cys Lys Tyr Val Lys Glu Leu Arg Ala Pro Ser Cys
20 25 30

Ile Cys His Pro Gly Tyr His Gly Glu Arg Cys His Gly Leu Ser Leu
35 40 45

APPENDIX I

RYST1	51.590	198.710	78.900	90.00	102.03	90.00	P	21	
REMARK	Back-to-back								
ATOM	1	CB	ALA	A	2	-6.061	46.522	26.989	1.00 58.81 AAAA
ATOM	2	C	ALA	A	2	-6.041	44.455	25.567	1.00 60.47 AAAA
ATOM	3	O	ALA	A	2	-7.074	44.097	26.139	1.00 61.40 AAAA
ATOM	4	N	ALA	A	2	-5.771	46.741	24.537	1.00 58.41 AAAA
ATOM	5	CA	ALA	A	2	-5.491	45.878	25.727	1.00 59.64 AAAA
ATOM	6	N	GLU	A	3	-5.329	43.654	24.781	1.00 60.74 AAAA
ATOM	7	CA	GLU	A	3	-5.676	42.260	24.509	1.00 59.78 AAAA
ATOM	8	CB	GLU	A	3	-6.908	42.174	23.603	1.00 59.83 AAAA
ATOM	9	CG	GLU	A	3	-7.359	40.754	23.297	0.01 60.15 AAAA
ATOM	10	CD	GLU	A	3	-8.566	40.711	22.381	0.01 60.22 AAAA
ATOM	11	OE1	GLU	A	3	-8.470	41.219	21.244	0.01 60.23 AAAA
ATOM	12	OE2	GLU	A	3	-9.612	40.170	22.799	0.01 60.24 AAAA
ATOM	13	C	GLU	A	3	-4.460	41.704	23.786	1.00 59.00 AAAA
ATOM	14	O	GLU	A	3	-4.512	41.401	22.598	1.00 59.20 AAAA
ATOM	15	N	LYS	A	4	-3.363	41.594	24.526	1.00 58.54 AAAA
ATOM	16	CA	LYS	A	4	-2.090	41.115	24.003	1.00 57.83 AAAA
ATOM	17	CB	LYS	A	4	-1.317	42.322	23.462	1.00 57.36 AAAA
ATOM	18	CG	LYS	A	4	0.125	42.055	23.113	1.00 59.34 AAAA
ATOM	19	CD	LYS	A	4	0.764	43.260	22.433	1.00 59.63 AAAA
ATOM	20	CE	LYS	A	4	0.260	43.436	21.012	1.00 59.41 AAAA
ATOM	21	NZ	LYS	A	4	0.959	44.554	20.333	1.00 58.90 AAAA
ATOM	22	C	LYS	A	4	-1.307	40.406	25.127	1.00 56.93 AAAA
ATOM	23	O	LYS	A	4	-1.211	40.936	26.232	1.00 56.97 AAAA
ATOM	24	N	LYS	A	5	-0.763	39.217	24.851	1.00 55.84 AAAA
ATOM	25	CA	LYS	A	5	-0.011	38.443	25.858	1.00 55.45 AAAA
ATOM	26	CB	LYS	A	5	0.492	37.119	25.270	1.00 55.60 AAAA
ATOM	27	CG	LYS	A	5	-0.574	36.217	24.678	1.00 56.14 AAAA
ATOM	28	CD	LYS	A	5	-1.618	35.806	25.705	1.00 57.47 AAAA
ATOM	29	CE	LYS	A	5	-1.029	34.939	26.807	1.00 58.42 AAAA
ATOM	30	NZ	LYS	A	5	-2.090	34.422	27.726	1.00 59.38 AAAA
ATOM	31	C	LYS	A	5	1.195	39.187	26.437	1.00 55.15 AAAA
ATOM	32	O	LYS	A	5	2.007	39.739	25.695	1.00 56.13 AAAA
ATOM	33	N	VAL	A	6	1.321	39.187	27.760	1.00 53.53 AAAA
ATOM	34	CA	VAL	A	6	2.436	39.861	28.417	1.00 52.08 AAAA
ATOM	35	CB	VAL	A	6	1.982	41.185	29.057	1.00 51.87 AAAA
ATOM	36	CG1	VAL	A	6	1.430	42.115	27.990	0.01 51.98 AAAA
ATOM	37	CG2	VAL	A	6	0.928	40.914	30.120	0.01 51.99 AAAA
ATOM	38	C	VAL	A	6	3.011	38.954	29.495	1.00 51.28 AAAA
ATOM	39	O	VAL	A	6	2.311	38.089	30.003	1.00 51.30 AAAA
ATOM	40	N	CYS	A	7	4.283	39.138	29.835	1.00 50.82 AAAA
ATOM	41	CA	CYS	A	7	4.923	38.314	30.863	1.00 51.02 AAAA
ATOM	42	C	CYS	A	7	5.838	39.135	31.766	1.00 50.09 AAAA
ATOM	43	O	CYS	A	7	6.325	40.191	31.362	1.00 50.09 AAAA
ATOM	44	CB	CYS	A	7	5.724	37.187	30.218	1.00 51.75 AAAA
ATOM	45	SG	CYS	A	7	7.007	37.748	29.053	1.00 55.51 AAAA
ATOM	46	N	GLN	A	8	6.065	38.644	32.985	1.00 49.52 AAAA
ATOM	47	CA	GLN	A	8	6.912	39.342	33.961	1.00 47.97 AAAA
ATOM	48	CB	GLN	A	8	7.076	38.526	35.255	1.00 50.66 AAAA
ATOM	49	CG	GLN	A	8	5.813	37.838	35.762	1.00 55.51 AAAA
ATOM	50	CD	GLN	A	8	4.563	38.693	35.614	1.00 59.06 AAAA
ATOM	51	OE1	GLN	A	8	4.502	39.828	36.103	1.00 61.39 AAAA
ATOM	52	NE2	GLN	A	8	3.553	38.147	34.935	1.00 60.49 AAAA
ATOM	53	C	GLN	A	8	8.284	39.604	33.378	1.00 44.54 AAAA
ATOM	54	O	GLN	A	8	8.419	40.312	32.398	1.00 43.87 AAAA
ATOM	55	N	GLY	A	9	9.308	39.024	33.980	1.00 42.16 AAAA
ATOM	56	CA	GLY	A	9	10.644	39.240	33.466	1.00 39.11 AAAA
ATOM	57	C	GLY	A	9	11.642	38.293	34.079	1.00 35.76 AAAA
ATOM	58	O	GLY	A	9	11.282	37.218	34.527	1.00 35.38 AAAA
ATOM	59	N	THR	A	10	12.900	38.700	34.102	1.00 33.10 AAAA
ATOM	60	CA	THR	A	10	13.949	37.873	34.665	1.00 31.42 AAAA
ATOM	61	CB	THR	A	10	14.401	36.809	33.662	1.00 30.13 AAAA
ATOM	62	OG1	THR	A	10	13.388	35.812	33.532	1.00 27.61 AAAA
ATOM	63	CG2	THR	A	10	15.668	36.161	34.113	1.00 31.72 AAAA
ATOM	64	C	THR	A	10	15.128	38.752	35.028	1.00 31.82 AAAA
ATOM	65	O	THR	A	10	15.921	39.110	34.177	1.00 32.51 AAAA
ATOM	66	N	SER	A	11	15.238	39.103	36.300	1.00 31.41 AAAA
ATOM	67	CA	SER	A	11	16.323	39.949	36.763	1.00 30.43 AAAA
ATOM	68	CB	SER	A	11	15.814	40.805	37.925	1.00 30.55 AAAA
ATOM	69	OG	SER	A	11	16.526	42.021	38.035	1.00 32.82 AAAA
ATOM	70	C	SER	A	11	17.537	39.102	37.189	1.00 29.54 AAAA

ATOM	71	O	SER	A	11	18.512	39.613	37.722	1.00	29.25	AAAA
ATOM	72	N	ASN	A	12	17.470	37.803	36.932	1.00	28.62	AAAA
ATOM	73	CA	ASN	A	12	18.547	36.875	37.278	1.00	28.35	AAAA
ATOM	74	CB	ASN	A	12	18.214	35.457	36.765	1.00	29.25	AAAA
ATOM	75	CG	ASN	A	12	17.133	34.730	37.589	1.00	28.99	AAAA
ATOM	76	OD1	ASN	A	12	16.591	33.726	37.131	1.00	27.16	AAAA
ATOM	77	ND2	ASN	A	12	16.840	35.213	38.795	1.00	27.67	AAAA
ATOM	78	C	ASN	A	12	19.922	37.266	36.713	1.00	27.48	AAAA
ATOM	79	O	ASN	A	12	20.926	36.674	37.089	1.00	27.50	AAAA
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ATOM	81	CA	LYS	A	13	21.218	38.670	35.161	1.00	26.93	AAAA
ATOM	82	CB	LYS	A	13	22.047	39.562	36.091	1.00	26.91	AAAA
ATOM	83	CG	LYS	A	13	21.659	41.035	36.099	1.00	26.67	AAAA
ATOM	84	CD	LYS	A	13	22.535	41.830	37.053	0.01	26.20	AAAA
ATOM	85	CE	LYS	A	13	22.125	43.293	37.090	0.01	25.99	AAAA
ATOM	86	NZ	LYS	A	13	22.217	43.926	35.746	0.01	26.11	AAAA
ATOM	87	C	LYS	A	13	22.105	37.522	34.656	1.00	28.09	AAAA
ATOM	88	O	LYS	A	13	21.739	36.792	33.721	1.00	28.64	AAAA
ATOM	89	N	LEU	A	14	23.274	37.357	35.274	1.00	27.62	AAAA
ATOM	90	CA	LEU	A	14	24.209	36.320	34.846	1.00	26.42	AAAA
ATOM	91	CB	LEU	A	14	25.618	36.907	34.733	1.00	25.41	AAAA
ATOM	92	CG	LEU	A	14	25.915	37.843	33.568	1.00	25.14	AAAA
ATOM	93	CD1	LEU	A	14	27.348	38.304	33.623	1.00	26.46	AAAA
ATOM	94	CD2	LEU	A	14	25.677	37.110	32.278	1.00	26.96	AAAA
ATOM	95	C	LEU	A	14	24.256	35.063	35.713	1.00	26.50	AAAA
ATOM	96	O	LEU	A	14	25.029	34.151	35.434	1.00	27.83	AAAA
ATOM	97	N	THR	A	15	23.448	35.012	36.764	1.00	24.32	AAAA
ATOM	98	CA	THR	A	15	23.426	33.838	37.633	1.00	22.53	AAAA
ATOM	99	CB	THR	A	15	22.522	34.052	38.859	1.00	22.12	AAAA
ATOM	100	OG1	THR	A	15	23.142	34.968	39.765	1.00	22.07	AAAA
ATOM	101	CG2	THR	A	15	22.248	32.744	39.551	1.00	18.60	AAAA
ATOM	102	C	THR	A	15	22.853	32.676	36.856	1.00	22.48	AAAA
ATOM	103	O	THR	A	15	22.181	32.881	35.852	1.00	22.65	AAAA
ATOM	104	N	GLN	A	16	23.120	31.461	37.325	1.00	22.82	AAAA
ATOM	105	CA	GLN	A	16	22.597	30.266	36.688	1.00	24.49	AAAA
ATOM	106	CB	GLN	A	16	23.712	29.370	36.173	1.00	24.75	AAAA
ATOM	107	CG	GLN	A	16	23.172	28.162	35.437	1.00	28.55	AAAA
ATOM	108	CD	GLN	A	16	24.261	27.227	34.944	1.00	30.72	AAAA
ATOM	109	OE1	GLN	A	16	25.216	27.650	34.287	1.00	30.40	AAAA
ATOM	110	NE2	GLN	A	16	24.116	25.942	35.253	1.00	29.88	AAAA
ATOM	111	C	GLN	A	16	21.783	29.503	37.711	1.00	26.08	AAAA
ATOM	112	O	GLN	A	16	22.325	29.042	38.713	1.00	26.14	AAAA
ATOM	113	N	LEU	A	17	20.481	29.383	37.441	1.00	27.26	AAAA
ATOM	114	CA	LEU	A	17	19.520	28.696	38.306	1.00	25.85	AAAA
ATOM	115	CB	LEU	A	17	18.095	29.048	37.897	1.00	24.13	AAAA
ATOM	116	CG	LEU	A	17	17.748	30.462	37.457	1.00	21.42	AAAA
ATOM	117	CD1	LEU	A	17	16.330	30.445	36.961	1.00	18.67	AAAA
ATOM	118	CD2	LEU	A	17	17.924	31.441	38.589	1.00	20.21	AAAA
ATOM	119	C	LEU	A	17	19.666	27.192	38.214	1.00	27.12	AAAA
ATOM	120	O	LEU	A	17	18.939	26.549	37.474	1.00	27.57	AAAA
ATOM	121	N	GLY	A	18	20.598	26.636	38.976	1.00	29.90	AAAA
ATOM	122	CA	GLY	A	18	20.819	25.204	38.959	1.00	30.29	AAAA
ATOM	123	C	GLY	A	18	21.522	24.743	37.702	1.00	31.68	AAAA
ATOM	124	O	GLY	A	18	22.425	25.410	37.194	1.00	31.99	AAAA
ATOM	125	N	THR	A	19	21.083	23.596	37.197	1.00	32.53	AAAA
ATOM	126	CA	THR	A	19	21.639	22.968	35.997	1.00	32.87	AAAA
ATOM	127	CB	THR	A	19	21.363	21.447	36.043	1.00	33.47	AAAA
ATOM	128	OG1	THR	A	19	19.962	21.220	36.262	1.00	32.74	AAAA
ATOM	129	CG2	THR	A	19	22.158	20.800	37.169	1.00	32.55	AAAA
ATOM	130	C	THR	A	19	21.105	23.528	34.659	1.00	32.18	AAAA
ATOM	131	O	THR	A	19	20.057	24.184	34.624	1.00	31.79	AAAA
ATOM	132	N	PHE	A	20	21.825	23.254	33.565	1.00	30.46	AAAA
ATOM	133	CA	PHE	A	20	21.418	23.720	32.236	1.00	28.37	AAAA
ATOM	134	CB	PHE	A	20	22.319	23.153	31.146	1.00	24.21	AAAA
ATOM	135	CG	PHE	A	20	23.681	23.732	31.128	1.00	20.28	AAAA
ATOM	136	CD1	PHE	A	20	24.776	22.930	30.873	1.00	19.31	AAAA
ATOM	137	CD2	PHE	A	20	23.877	25.075	31.371	1.00	20.48	AAAA
ATOM	138	CE1	PHE	A	20	26.046	23.449	30.864	1.00	19.66	AAAA
ATOM	139	CE2	PHE	A	20	25.148	25.616	31.365	1.00	21.29	AAAA
ATOM	140	CZ	PHE	A	20	26.239	24.802	31.112	1.00	22.08	AAAA
ATOM	141	C	PHE	A	20	19.992	23.324	31.915	1.00	29.87	AAAA
ATOM	142	O	PHE	A	20	19.193	24.164	31.491	1.00	29.62	AAAA
ATOM	143	N	GLU	A	21	19.672	22.044	32.098	1.00	30.85	AAAA
ATOM	144	CA	GLU	A	21	18.319	21.587	31.813	1.00	33.50	AAAA
ATOM	145	CB	GLU	A	21	18.175	20.083	32.012	1.00	34.68	AAAA

ATOM	146	CG	GLU	A	21	16.851	19.555	31.472	1.00	36.13	AAAA
ATOM	147	CD	GLU	A	21	16.576	18.123	31.871	1.00	38.47	AAAA
ATOM	148	OE1	GLU	A	21	17.462	17.261	31.688	1.00	39.21	AAAA
ATOM	149	OE2	GLU	A	21	15.460	17.856	32.369	1.00	40.67	AAAA
ATOM	150	C	GLU	A	21	17.317	22.301	32.711	1.00	34.17	AAAA
ATOM	151	O	GLU	A	21	16.226	22.664	32.271	1.00	33.71	AAAA
ATOM	152	N	ASP	A	22	17.678	22.504	33.972	1.00	34.19	AAAA
ATOM	153	CA	ASP	A	22	16.769	23.194	34.864	1.00	35.05	AAAA
ATOM	154	CB	ASP	A	22	17.263	23.124	36.303	1.00	36.03	AAAA
ATOM	155	CG	ASP	A	22	16.600	22.006	37.076	1.00	37.68	AAAA
ATOM	156	OD1	ASP	A	22	15.386	21.797	36.851	1.00	37.16	AAAA
ATOM	157	OD2	ASP	A	22	17.277	21.349	37.899	1.00	38.05	AAAA
ATOM	158	C	ASP	A	22	16.635	24.630	34.418	1.00	34.40	AAAA
ATOM	159	O	ASP	A	22	15.545	25.110	34.129	1.00	34.49	AAAA
ATOM	160	N	HIS	A	23	17.763	25.313	34.360	1.00	34.16	AAAA
ATOM	161	CA	HIS	A	23	17.785	26.691	33.921	1.00	33.28	AAAA
ATOM	162	CB	HIS	A	23	19.217	27.040	33.507	1.00	31.13	AAAA
ATOM	163	CG	HIS	A	23	19.479	28.506	33.351	1.00	28.13	AAAA
ATOM	164	CD2	HIS	A	23	20.627	29.213	33.458	1.00	25.84	AAAA
ATOM	165	ND1	HIS	A	23	18.511	29.404	32.962	1.00	25.93	AAAA
ATOM	166	CE1	HIS	A	23	19.052	30.600	32.835	1.00	25.36	AAAA
ATOM	167	NE2	HIS	A	23	20.335	30.510	33.129	1.00	24.68	AAAA
ATOM	168	C	HIS	A	23	16.822	26.786	32.724	1.00	33.99	AAAA
ATOM	169	O	HIS	A	23	15.841	27.533	32.761	1.00	33.75	AAAA
ATOM	170	N	PHE	A	24	17.073	25.988	31.685	1.00	33.86	AAAA
ATOM	171	CA	PHE	A	24	16.235	26.032	30.492	1.00	33.10	AAAA
ATOM	172	CB	PHE	A	24	16.553	24.879	29.533	1.00	33.34	AAAA
ATOM	173	CG	PHE	A	24	15.655	24.850	28.324	1.00	34.12	AAAA
ATOM	174	CD1	PHE	A	24	15.921	25.651	27.223	1.00	34.03	AAAA
ATOM	175	CD2	PHE	A	24	14.468	24.123	28.343	1.00	34.13	AAAA
ATOM	176	CE1	PHE	A	24	15.013	25.738	26.170	1.00	33.43	AAAA
ATOM	177	CE2	PHE	A	24	13.560	24.207	27.295	1.00	33.55	AAAA
ATOM	178	CZ	PHE	A	24	13.831	25.017	26.211	1.00	33.44	AAAA
ATOM	179	C	PHE	A	24	14.757	25.988	30.814	1.00	32.79	AAAA
ATOM	180	O	PHE	A	24	14.007	26.902	30.493	1.00	31.72	AAAA
ATOM	181	N	LEU	A	25	14.338	24.899	31.437	1.00	33.00	AAAA
ATOM	182	CA	LEU	A	25	12.942	24.733	31.788	1.00	32.52	AAAA
ATOM	183	CB	LEU	A	25	12.800	23.672	32.883	1.00	31.77	AAAA
ATOM	184	CG	LEU	A	25	12.793	22.204	32.445	1.00	32.63	AAAA
ATOM	185	CD1	LEU	A	25	13.788	21.963	31.329	1.00	32.24	AAAA
ATOM	186	CD2	LEU	A	25	13.106	21.335	33.641	1.00	33.06	AAAA
ATOM	187	C	LEU	A	25	12.327	26.041	32.242	1.00	32.17	AAAA
ATOM	188	O	LEU	A	25	11.276	26.437	31.742	1.00	31.88	AAAA
ATOM	189	N	SER	A	26	12.997	26.720	33.169	1.00	32.02	AAAA
ATOM	190	CA	SER	A	26	12.481	27.973	33.708	1.00	32.64	AAAA
ATOM	191	CB	SER	A	26	13.391	28.498	34.823	1.00	34.43	AAAA
ATOM	192	OG	SER	A	26	13.250	27.748	36.026	1.00	35.86	AAAA
ATOM	193	C	SER	A	26	12.348	29.012	32.622	1.00	32.40	AAAA
ATOM	194	O	SER	A	26	11.366	29.744	32.556	1.00	32.32	AAAA
ATOM	195	N	LEU	A	27	13.349	29.064	31.758	1.00	32.84	AAAA
ATOM	196	CA	LEU	A	27	13.345	30.010	30.658	1.00	31.91	AAAA
ATOM	197	CB	LEU	A	27	14.531	29.750	29.738	1.00	29.65	AAAA
ATOM	198	CG	LEU	A	27	14.682	30.703	28.561	1.00	29.38	AAAA
ATOM	199	CD1	LEU	A	27	14.997	32.102	29.065	1.00	29.54	AAAA
ATOM	200	CD2	LEU	A	27	15.781	30.192	27.654	1.00	29.92	AAAA
ATOM	201	C	LEU	A	27	12.061	29.828	29.883	1.00	32.17	AAAA
ATOM	202	O	LEU	A	27	11.334	30.780	29.625	1.00	34.88	AAAA
ATOM	203	N	GLN	A	28	11.779	28.583	29.533	1.00	31.30	AAAA
ATOM	204	CA	GLN	A	28	10.598	28.251	28.758	1.00	30.41	AAAA
ATOM	205	CB	GLN	A	28	10.649	26.772	28.379	1.00	32.28	AAAA
ATOM	206	CG	GLN	A	28	9.376	26.201	27.787	1.00	32.26	AAAA
ATOM	207	CD	GLN	A	28	9.613	24.846	27.159	1.00	32.58	AAAA
ATOM	208	OE1	GLN	A	28	8.673	24.138	26.814	1.00	34.10	AAAA
ATOM	209	NE2	GLN	A	28	10.880	24.484	26.997	1.00	30.49	AAAA
ATOM	210	C	GLN	A	28	9.296	28.572	29.450	1.00	29.28	AAAA
ATOM	211	O	GLN	A	28	8.336	28.947	28.798	1.00	28.59	AAAA
ATOM	212	N	ARG	A	29	9.262	28.431	30.768	1.00	28.98	AAAA
ATOM	213	CA	ARG	A	29	8.044	28.699	31.506	1.00	30.05	AAAA
ATOM	214	CB	ARG	A	29	8.197	28.312	32.971	1.00	30.95	AAAA
ATOM	215	CG	ARG	A	29	8.287	26.821	33.231	1.00	34.32	AAAA
ATOM	216	CD	ARG	A	29	8.424	26.494	34.720	1.00	35.70	AAAA
ATOM	217	NE	ARG	A	29	7.250	26.872	35.505	1.00	37.88	AAAA
ATOM	218	CZ	ARG	A	29	6.940	28.116	35.866	1.00	40.08	AAAA
ATOM	219	NH1	ARG	A	29	7.714	29.131	35.511	1.00	41.01	AAAA
ATOM	220	NH2	ARG	A	29	5.861	28.346	36.614	1.00	41.07	AAAA

ATOM	221	C	ARG	A	29	7.668	30.150	31.432	1.00	30.86	AAAA
ATOM	222	O	ARG	A	29	6.542	30.493	31.082	1.00	31.01	AAAA
ATOM	223	N	MET	A	30	8.619	31.003	31.782	1.00	32.18	AAAA
ATOM	224	CA	MET	A	30	8.398	32.442	31.779	1.00	33.97	AAAA
ATOM	225	CB	MET	A	30	9.663	33.160	32.260	1.00	33.21	AAAA
ATOM	226	CG	MET	A	30	9.635	34.679	32.131	1.00	33.34	AAAA
ATOM	227	SD	MET	A	30	8.403	35.531	33.153	1.00	34.09	AAAA
ATOM	228	CE	MET	A	30	9.205	35.530	34.726	1.00	34.78	AAAA
ATOM	229	C	MET	A	30	7.980	33.023	30.431	1.00	35.52	AAAA
ATOM	230	O	MET	A	30	7.077	33.861	30.370	1.00	36.18	AAAA
ATOM	231	N	PHE	A	31	8.612	32.562	29.352	1.00	36.10	AAAA
ATOM	232	CA	PHE	A	31	8.331	33.113	28.039	1.00	37.10	AAAA
ATOM	233	CB	PHE	A	31	9.646	33.344	27.298	1.00	36.24	AAAA
ATOM	234	CG	PHE	A	31	10.540	34.323	27.980	1.00	35.90	AAAA
ATOM	235	CD1	PHE	A	31	11.577	33.888	28.792	1.00	35.99	AAAA
ATOM	236	CD2	PHE	A	31	10.293	35.688	27.879	1.00	34.97	AAAA
ATOM	237	CE1	PHE	A	31	12.357	34.799	29.502	1.00	36.86	AAAA
ATOM	238	CE2	PHE	A	31	11.063	36.608	28.583	1.00	36.16	AAAA
ATOM	239	CZ	PHE	A	31	12.099	36.164	29.400	1.00	36.40	AAAA
ATOM	240	C	PHE	A	31	7.355	32.420	27.122	1.00	38.64	AAAA
ATOM	241	O	PHE	A	31	7.019	32.960	26.076	1.00	39.27	AAAA
ATOM	242	N	ASN	A	32	6.882	31.240	27.491	1.00	41.62	AAAA
ATOM	243	CA	ASN	A	32	5.941	30.540	26.621	1.00	44.06	AAAA
ATOM	244	CB	ASN	A	32	5.387	29.284	27.315	1.00	48.44	AAAA
ATOM	245	CG	ASN	A	32	5.147	28.123	26.344	1.00	53.57	AAAA
ATOM	246	OD1	ASN	A	32	5.708	28.098	25.243	1.00	53.73	AAAA
ATOM	247	ND2	ASN	A	32	4.342	27.146	26.766	1.00	58.79	AAAA
ATOM	248	C	ASN	A	32	4.801	31.484	26.248	1.00	43.01	AAAA
ATOM	249	O	ASN	A	32	4.071	31.962	27.121	1.00	39.97	AAAA
ATOM	250	N	ASN	A	33	4.697	31.773	24.949	1.00	42.97	AAAA
ATOM	251	CA	ASN	A	33	3.645	32.626	24.394	1.00	43.90	AAAA
ATOM	252	CB	ASN	A	33	2.279	32.100	24.831	1.00	43.23	AAAA
ATOM	253	CG	ASN	A	33	2.170	30.611	24.685	1.00	44.30	AAAA
ATOM	254	OD1	ASN	A	33	2.226	30.080	23.575	1.00	45.37	AAAA
ATOM	255	ND2	ASN	A	33	2.030	29.916	25.809	1.00	42.75	AAAA
ATOM	256	C	ASN	A	33	3.710	34.117	24.719	1.00	44.61	AAAA
ATOM	257	O	ASN	A	33	2.750	34.850	24.460	1.00	44.75	AAAA
ATOM	258	N	CYS	A	34	4.813	34.582	25.289	1.00	45.15	AAAA
ATOM	259	CA	CYS	A	34	4.887	35.995	25.615	1.00	45.67	AAAA
ATOM	260	C	CYS	A	34	4.998	36.789	24.320	1.00	44.70	AAAA
ATOM	261	O	CYS	A	34	5.653	36.354	23.371	1.00	43.72	AAAA
ATOM	262	CB	CYS	A	34	6.089	36.295	26.518	1.00	48.13	AAAA
ATOM	263	SG	CYS	A	34	6.018	37.952	27.285	1.00	53.06	AAAA
ATOM	264	N	GLU	A	35	4.329	37.941	24.291	1.00	43.27	AAAA
ATOM	265	CA	GLU	A	35	4.334	38.847	23.149	1.00	41.48	AAAA
ATOM	266	CB	GLU	A	35	2.909	39.185	22.753	1.00	42.54	AAAA
ATOM	267	CG	GLU	A	35	2.491	38.559	21.458	1.00	45.61	AAAA
ATOM	268	CD	GLU	A	35	1.021	38.201	21.436	1.00	47.77	AAAA
ATOM	269	OE1	GLU	A	35	0.181	39.073	21.763	1.00	48.10	AAAA
ATOM	270	OE2	GLU	A	35	0.712	37.041	21.084	1.00	48.93	AAAA
ATOM	271	C	GLU	A	35	5.036	40.103	23.613	1.00	40.12	AAAA
ATOM	272	O	GLU	A	35	5.942	40.624	22.952	1.00	38.44	AAAA
ATOM	273	N	VAL	A	36	4.594	40.571	24.777	1.00	39.04	AAAA
ATOM	274	CA	VAL	A	36	5.143	41.755	25.425	1.00	37.55	AAAA
ATOM	275	CB	VAL	A	36	4.040	42.749	25.846	1.00	37.92	AAAA
ATOM	276	CG1	VAL	A	36	4.639	44.116	26.050	1.00	37.09	AAAA
ATOM	277	CG2	VAL	A	36	2.924	42.779	24.815	1.00	38.33	AAAA
ATOM	278	C	VAL	A	36	5.810	41.273	26.698	1.00	35.89	AAAA
ATOM	279	O	VAL	A	36	5.203	40.550	27.487	1.00	36.05	AAAA
ATOM	280	N	VAL	A	37	7.062	41.657	26.894	1.00	33.93	AAAA
ATOM	281	CA	VAL	A	37	7.779	41.266	28.093	1.00	31.78	AAAA
ATOM	282	CB	VAL	A	37	9.148	40.629	27.754	1.00	31.02	AAAA
ATOM	283	CG1	VAL	A	37	9.977	40.448	29.002	1.00	30.13	AAAA
ATOM	284	CG2	VAL	A	37	8.944	39.293	27.095	1.00	30.51	AAAA
ATOM	285	C	VAL	A	37	7.999	42.527	28.909	1.00	31.31	AAAA
ATOM	286	O	VAL	A	37	8.938	43.273	28.653	1.00	31.29	AAAA
ATOM	287	N	LEU	A	38	7.102	42.787	29.860	1.00	30.71	AAAA
ATOM	288	CA	LEU	A	38	7.241	43.952	30.732	1.00	29.78	AAAA
ATOM	289	CB	LEU	A	38	6.077	44.012	31.723	1.00	30.16	AAAA
ATOM	290	CG	LEU	A	38	4.746	44.675	31.338	1.00	31.38	AAAA
ATOM	291	CD1	LEU	A	38	4.474	44.510	29.847	1.00	32.46	AAAA
ATOM	292	CD2	LEU	A	38	3.610	44.078	32.183	1.00	29.58	AAAA
ATOM	293	C	LEU	A	38	8.530	43.659	31.467	1.00	28.81	AAAA
ATOM	294	O	LEU	A	38	8.700	42.574	31.988	1.00	29.45	AAAA
ATOM	295	N	GLY	A	39	9.466	44.583	31.499	1.00	28.67	AAAA

ATOM	296	CA	GLY	A	39	10.688	44.251	32.200	1.00	31.77	AAAA
ATOM	297	C	GLY	A	39	11.844	43.841	31.313	1.00	33.15	AAAA
ATOM	298	O	GLY	A	39	12.163	44.542	30.358	1.00	33.73	AAAA
ATOM	299	N	ASN	A	40	12.477	42.708	31.594	1.00	33.63	AAAA
ATOM	300	CA	ASN	A	40	13.638	42.328	30.789	1.00	34.49	AAAA
ATOM	301	CB	ASN	A	40	14.910	42.588	31.601	1.00	35.35	AAAA
ATOM	302	CG	ASN	A	40	15.068	44.052	31.988	1.00	36.64	AAAA
ATOM	303	OD1	ASN	A	40	14.142	44.845	31.863	1.00	39.26	AAAA
ATOM	304	ND2	ASN	A	40	16.240	44.409	32.471	1.00	35.29	AAAA
ATOM	305	C	ASN	A	40	13.675	40.910	30.221	1.00	34.66	AAAA
ATOM	306	O	ASN	A	40	13.087	39.983	30.780	1.00	35.72	AAAA
ATOM	307	N	LEU	A	41	14.379	40.759	29.098	1.00	33.18	AAAA
ATOM	308	CA	LEU	A	41	14.515	39.469	28.424	1.00	31.96	AAAA
ATOM	309	CB	LEU	A	41	14.208	39.624	26.931	1.00	31.70	AAAA
ATOM	310	CG	LEU	A	41	14.399	38.428	25.992	1.00	29.59	AAAA
ATOM	311	CD1	LEU	A	41	13.458	37.325	26.360	1.00	29.35	AAAA
ATOM	312	CD2	LEU	A	41	14.166	38.873	24.563	1.00	29.14	AAAA
ATOM	313	C	LEU	A	41	15.931	38.935	28.616	1.00	31.60	AAAA
ATOM	314	O	LEU	A	41	16.879	39.453	28.038	1.00	30.57	AAAA
ATOM	315	N	GLU	A	42	16.063	37.895	29.434	1.00	31.22	AAAA
ATOM	316	CA	GLU	A	42	17.358	37.307	29.732	1.00	29.63	AAAA
ATOM	317	CB	GLU	A	42	17.582	37.284	31.241	1.00	28.39	AAAA
ATOM	318	CG	GLU	A	42	18.001	38.625	31.827	1.00	31.36	AAAA
ATOM	319	CD	GLU	A	42	18.216	38.576	33.332	1.00	32.60	AAAA
ATOM	320	OE1	GLU	A	42	18.631	39.603	33.926	1.00	31.42	AAAA
ATOM	321	OE2	GLU	A	42	17.957	37.505	33.920	1.00	32.54	AAAA
ATOM	322	C	GLU	A	42	17.508	35.914	29.189	1.00	29.51	AAAA
ATOM	323	O	GLU	A	42	17.044	34.967	29.798	1.00	30.37	AAAA
ATOM	324	N	ILE	A	43	18.158	35.794	28.038	1.00	30.12	AAAA
ATOM	325	CA	ILE	A	43	18.402	34.498	27.405	1.00	30.24	AAAA
ATOM	326	CB	ILE	A	43	18.289	34.596	25.881	1.00	28.68	AAAA
ATOM	327	CG2	ILE	A	43	18.475	33.237	25.276	1.00	31.05	AAAA
ATOM	328	CG1	ILE	A	43	16.931	35.163	25.489	1.00	28.56	AAAA
ATOM	329	CD1	ILE	A	43	15.772	34.440	26.111	1.00	29.75	AAAA
ATOM	330	C	ILE	A	43	19.814	34.027	27.764	1.00	31.05	AAAA
ATOM	331	O	ILE	A	43	20.811	34.465	27.171	1.00	30.94	AAAA
ATOM	332	N	THR	A	44	19.897	33.114	28.724	1.00	31.13	AAAA
ATOM	333	CA	THR	A	44	21.198	32.648	29.171	1.00	31.78	AAAA
ATOM	334	CB	THR	A	44	21.561	33.366	30.506	1.00	32.62	AAAA
ATOM	335	OG1	THR	A	44	22.611	32.659	31.170	1.00	34.46	AAAA
ATOM	336	CG2	THR	A	44	20.356	33.448	31.427	1.00	31.31	AAAA
ATOM	337	C	THR	A	44	21.426	31.134	29.328	1.00	30.98	AAAA
ATOM	338	O	THR	A	44	20.514	30.370	29.628	1.00	29.97	AAAA
ATOM	339	N	TYR	A	45	22.670	30.728	29.095	1.00	30.43	AAAA
ATOM	340	CA	TYR	A	45	23.124	29.352	29.228	1.00	30.09	AAAA
ATOM	341	CB	TYR	A	45	23.073	28.959	30.697	1.00	30.57	AAAA
ATOM	342	CG	TYR	A	45	24.010	29.752	31.556	1.00	31.86	AAAA
ATOM	343	CD1	TYR	A	45	23.527	30.627	32.518	1.00	31.33	AAAA
ATOM	344	CE1	TYR	A	45	24.390	31.390	33.291	1.00	32.40	AAAA
ATOM	345	CD2	TYR	A	45	25.386	29.651	31.389	1.00	32.87	AAAA
ATOM	346	CE2	TYR	A	45	26.258	30.405	32.160	1.00	33.92	AAAA
ATOM	347	CZ	TYR	A	45	25.753	31.278	33.109	1.00	33.76	AAAA
ATOM	348	OH	TYR	A	45	26.612	32.053	33.856	1.00	34.93	AAAA
ATOM	349	C	TYR	A	45	22.477	28.243	28.396	1.00	30.71	AAAA
ATOM	350	O	TYR	A	45	22.759	27.066	28.623	1.00	31.67	AAAA
ATOM	351	N	VAL	A	46	21.623	28.588	27.439	1.00	29.73	AAAA
ATOM	352	CA	VAL	A	46	20.988	27.559	26.622	1.00	27.26	AAAA
ATOM	353	CB	VAL	A	46	20.002	28.184	25.624	1.00	25.06	AAAA
ATOM	354	CG1	VAL	A	46	19.374	27.122	24.772	1.00	21.59	AAAA
ATOM	355	CG2	VAL	A	46	18.924	28.933	26.386	1.00	22.42	AAAA
ATOM	356	C	VAL	A	46	22.092	26.791	25.912	1.00	27.17	AAAA
ATOM	357	O	VAL	A	46	23.091	27.367	25.529	1.00	26.81	AAAA
ATOM	358	N	GLN	A	47	21.915	25.484	25.766	1.00	29.25	AAAA
ATOM	359	CA	GLN	A	47	22.926	24.632	25.149	1.00	32.15	AAAA
ATOM	360	CB	GLN	A	47	23.222	23.461	26.074	1.00	30.54	AAAA
ATOM	361	CG	GLN	A	47	23.642	23.849	27.465	1.00	30.59	AAAA
ATOM	362	CD	GLN	A	47	25.088	24.256	27.547	1.00	30.61	AAAA
ATOM	363	OE1	GLN	A	47	25.980	23.477	27.245	1.00	30.62	AAAA
ATOM	364	NE2	GLN	A	47	25.328	25.485	27.965	1.00	32.03	AAAA
ATOM	365	C	GLN	A	47	22.592	24.084	23.760	1.00	34.96	AAAA
ATOM	366	O	GLN	A	47	21.421	24.004	23.360	1.00	34.72	AAAA
ATOM	367	N	ARG	A	48	23.643	23.691	23.038	1.00	37.37	AAAA
ATOM	368	CA	ARG	A	48	23.510	23.137	21.692	1.00	39.39	AAAA
ATOM	369	CB	ARG	A	48	24.795	22.425	21.281	1.00	41.46	AAAA
ATOM	370	CG	ARG	A	48	25.967	23.348	21.037	1.00	47.64	AAAA

ATOM	371	CD	ARG	A	48	27.302	22.677	21.377	1.00	53.31	AAAA
ATOM	372	NE	ARG	A	48	27.727	22.915	22.763	1.00	58.20	AAAA
ATOM	373	CZ	ARG	A	48	27.283	22.259	23.836	1.00	59.64	AAAA
ATOM	374	NH1	ARG	A	48	26.382	21.286	23.718	1.00	60.21	AAAA
ATOM	375	NH2	ARG	A	48	27.739	22.591	25.038	1.00	60.15	AAAA
ATOM	376	C	ARG	A	48	22.358	22.156	21.618	1.00	39.16	AAAA
ATOM	377	O	ARG	A	48	22.299	21.188	22.375	1.00	40.48	AAAA
ATOM	378	N	ASN	A	49	21.433	22.431	20.710	1.00	38.54	AAAA
ATOM	379	CA	ASN	A	49	20.272	21.583	20.483	1.00	36.22	AAAA
ATOM	380	CB	ASN	A	49	20.729	20.132	20.272	1.00	37.23	AAAA
ATOM	381	CG	ASN	A	49	21.688	19.978	19.080	1.00	39.56	AAAA
ATOM	382	OD1	ASN	A	49	21.338	20.267	17.931	1.00	40.26	AAAA
ATOM	383	ND2	ASN	A	49	22.902	19.516	19.358	1.00	40.67	AAAA
ATOM	384	C	ASN	A	49	19.166	21.638	21.537	1.00	34.68	AAAA
ATOM	385	O	ASN	A	49	18.755	20.609	22.049	1.00	34.93	AAAA
ATOM	386	N	TYR	A	50	18.668	22.830	21.853	1.00	33.19	AAAA
ATOM	387	CA	TYR	A	50	17.580	22.935	22.818	1.00	32.37	AAAA
ATOM	388	CB	TYR	A	50	18.027	23.681	24.070	1.00	31.43	AAAA
ATOM	389	CG	TYR	A	50	18.399	22.787	25.235	1.00	29.72	AAAA
ATOM	390	CD1	TYR	A	50	19.711	22.372	25.422	1.00	29.50	AAAA
ATOM	391	CE1	TYR	A	50	20.069	21.575	26.506	1.00	28.79	AAAA
ATOM	392	CD2	TYR	A	50	17.442	22.377	26.164	1.00	28.50	AAAA
ATOM	393	CE2	TYR	A	50	17.792	21.579	27.255	1.00	27.49	AAAA
ATOM	394	CZ	TYR	A	50	19.111	21.184	27.419	1.00	28.18	AAAA
ATOM	395	OH	TYR	A	50	19.495	20.411	28.493	1.00	27.60	AAAA
ATOM	396	C	TYR	A	50	16.278	23.561	22.305	1.00	32.94	AAAA
ATOM	397	O	TYR	A	50	15.318	23.675	23.055	1.00	34.88	AAAA
ATOM	398	N	ASP	A	51	16.226	23.954	21.040	1.00	32.53	AAAA
ATOM	399	CA	ASP	A	51	15.011	24.545	20.462	1.00	32.61	AAAA
ATOM	400	CB	ASP	A	51	13.931	23.487	20.156	1.00	32.88	AAAA
ATOM	401	CG	ASP	A	51	12.755	24.060	19.326	1.00	33.49	AAAA
ATOM	402	OD1	ASP	A	51	11.700	23.402	19.193	1.00	33.80	AAAA
ATOM	403	OD2	ASP	A	51	12.888	25.176	18.793	1.00	31.51	AAAA
ATOM	404	C	ASP	A	51	14.357	25.623	21.305	1.00	32.34	AAAA
ATOM	405	O	ASP	A	51	13.594	25.345	22.231	1.00	31.84	AAAA
ATOM	406	N	LEU	A	52	14.653	26.857	20.947	1.00	31.82	AAAA
ATOM	407	CA	LEU	A	52	14.098	28.008	21.611	1.00	33.01	AAAA
ATOM	408	CB	LEU	A	52	15.223	28.978	21.965	1.00	33.06	AAAA
ATOM	409	CG	LEU	A	52	16.355	28.478	22.861	1.00	31.38	AAAA
ATOM	410	CD1	LEU	A	52	17.602	29.314	22.643	1.00	31.11	AAAA
ATOM	411	CD2	LEU	A	52	15.904	28.540	24.296	1.00	31.01	AAAA
ATOM	412	C	LEU	A	52	13.173	28.633	20.571	1.00	34.37	AAAA
ATOM	413	O	LEU	A	52	13.261	29.828	20.289	1.00	34.94	AAAA
ATOM	414	N	SER	A	53	12.308	27.813	19.976	1.00	35.59	AAAA
ATOM	415	CA	SER	A	53	11.377	28.295	18.952	1.00	35.83	AAAA
ATOM	416	CB	SER	A	53	10.849	27.137	18.106	1.00	37.01	AAAA
ATOM	417	OG	SER	A	53	11.860	26.631	17.248	1.00	40.40	AAAA
ATOM	418	C	SER	A	53	10.213	29.034	19.562	1.00	34.21	AAAA
ATOM	419	O	SER	A	53	9.437	29.666	18.858	1.00	33.53	AAAA
ATOM	420	N	PHE	A	54	10.096	28.938	20.877	1.00	33.41	AAAA
ATOM	421	CA	PHE	A	54	9.033	29.612	21.587	1.00	34.26	AAAA
ATOM	422	CB	PHE	A	54	8.923	29.040	23.006	1.00	36.80	AAAA
ATOM	423	CG	PHE	A	54	10.203	29.110	23.802	1.00	37.39	AAAA
ATOM	424	CD1	PHE	A	54	10.601	30.295	24.408	1.00	37.62	AAAA
ATOM	425	CD2	PHE	A	54	11.021	27.993	23.920	1.00	37.64	AAAA
ATOM	426	CE1	PHE	A	54	11.796	30.364	25.114	1.00	38.50	AAAA
ATOM	427	CE2	PHE	A	54	12.216	28.056	24.623	1.00	38.35	AAAA
ATOM	428	CZ	PHE	A	54	12.604	29.244	25.220	1.00	38.39	AAAA
ATOM	429	C	PHE	A	54	9.307	31.118	21.621	1.00	33.82	AAAA
ATOM	430	O	PHE	A	54	8.402	31.923	21.850	1.00	33.90	AAAA
ATOM	431	N	LEU	A	55	10.563	31.485	21.377	1.00	32.49	AAAA
ATOM	432	CA	LEU	A	55	10.991	32.879	21.371	1.00	31.03	AAAA
ATOM	433	CB	LEU	A	55	12.519	32.973	21.404	1.00	27.53	AAAA
ATOM	434	CG	LEU	A	55	13.252	32.481	22.653	1.00	23.94	AAAA
ATOM	435	CD1	LEU	A	55	14.746	32.595	22.456	1.00	22.37	AAAA
ATOM	436	CD2	LEU	A	55	12.818	33.297	23.837	1.00	22.22	AAAA
ATOM	437	C	LEU	A	55	10.484	33.612	20.143	1.00	32.28	AAAA
ATOM	438	O	LEU	A	55	10.605	34.835	20.050	1.00	33.20	AAAA
ATOM	439	N	LYS	A	56	9.924	32.864	19.198	1.00	33.08	AAAA
ATOM	440	CA	LYS	A	56	9.395	33.451	17.970	1.00	33.33	AAAA
ATOM	441	CB	LYS	A	56	9.062	32.349	16.951	1.00	34.11	AAAA
ATOM	442	CG	LYS	A	56	10.279	31.659	16.355	1.00	35.12	AAAA
ATOM	443	CD	LYS	A	56	9.913	30.437	15.523	1.00	34.25	AAAA
ATOM	444	CE	LYS	A	56	11.180	29.725	15.070	1.00	34.40	AAAA
ATOM	445	NZ	LYS	A	56	10.987	28.282	14.734	1.00	34.78	AAAA

ATOM	446	C	LYS	A	56	8.153	34.310	18.219	1.00	33.22	AAAA
ATOM	447	O	LYS	A	56	7.596	34.879	17.284	1.00	33.00	AAAA
ATOM	448	N	THR	A	57	7.712	34.411	19.468	1.00	32.43	AAAA
ATOM	449	CA	THR	A	57	6.537	35.222	19.750	1.00	32.48	AAAA
ATOM	450	CB	THR	A	57	5.516	34.477	20.656	1.00	31.66	AAAA
ATOM	451	OG1	THR	A	57	6.130	34.122	21.895	1.00	31.61	AAAA
ATOM	452	CG2	THR	A	57	5.005	33.231	19.976	1.00	30.12	AAAA
ATOM	453	C	THR	A	57	6.867	36.569	20.389	1.00	32.93	AAAA
ATOM	454	O	THR	A	57	6.091	37.513	20.275	1.00	33.17	AAAA
ATOM	455	N	ILE	A	58	8.020	36.670	21.043	1.00	33.94	AAAA
ATOM	456	CA	ILE	A	58	8.407	37.918	21.704	1.00	35.40	AAAA
ATOM	457	CB	ILE	A	58	9.807	37.798	22.374	1.00	34.47	AAAA
ATOM	458	CG2	ILE	A	58	10.237	39.133	22.956	1.00	33.06	AAAA
ATOM	459	CG1	ILE	A	58	9.777	36.715	23.451	1.00	33.90	AAAA
ATOM	460	CD1	ILE	A	58	8.562	36.783	24.338	1.00	33.41	AAAA
ATOM	461	C	ILE	A	58	8.435	39.084	20.731	1.00	36.36	AAAA
ATOM	462	O	ILE	A	58	9.338	39.178	19.911	1.00	38.67	AAAA
ATOM	463	N	GLN	A	59	7.461	39.980	20.817	1.00	36.49	AAAA
ATOM	464	CA	GLN	A	59	7.438	41.115	19.899	1.00	37.87	AAAA
ATOM	465	CB	GLN	A	59	6.006	41.500	19.528	1.00	40.06	AAAA
ATOM	466	CG	GLN	A	59	5.220	40.444	18.791	1.00	44.20	AAAA
ATOM	467	CD	GLN	A	59	3.980	41.023	18.159	1.00	46.87	AAAA
ATOM	468	OE1	GLN	A	59	4.064	41.902	17.288	1.00	48.11	AAAA
ATOM	469	NE2	GLN	A	59	2.816	40.549	18.595	1.00	47.66	AAAA
ATOM	470	C	GLN	A	59	8.109	42.345	20.466	1.00	38.01	AAAA
ATOM	471	O	GLN	A	59	8.956	42.957	19.815	1.00	37.54	AAAA
ATOM	472	N	GLU	A	60	7.712	42.696	21.689	1.00	38.41	AAAA
ATOM	473	CA	GLU	A	60	8.207	43.878	22.383	1.00	37.44	AAAA
ATOM	474	CB	GLU	A	60	7.047	44.865	22.550	1.00	40.28	AAAA
ATOM	475	CG	GLU	A	60	7.377	46.078	23.399	1.00	45.56	AAAA
ATOM	476	CD	GLU	A	60	6.183	46.994	23.646	1.00	47.49	AAAA
ATOM	477	OE1	GLU	A	60	5.462	47.341	22.673	1.00	45.57	AAAA
ATOM	478	OE2	GLU	A	60	5.990	47.376	24.825	1.00	48.26	AAAA
ATOM	479	C	GLU	A	60	8.816	43.557	23.750	1.00	35.19	AAAA
ATOM	480	O	GLU	A	60	8.255	42.784	24.521	1.00	34.92	AAAA
ATOM	481	N	VAL	A	61	9.963	44.163	24.035	1.00	32.44	AAAA
ATOM	482	CA	VAL	A	61	10.669	43.988	25.299	1.00	31.09	AAAA
ATOM	483	CB	VAL	A	61	11.995	43.239	25.091	1.00	30.27	AAAA
ATOM	484	CG1	VAL	A	61	12.915	43.492	26.256	1.00	29.34	AAAA
ATOM	485	CG2	VAL	A	61	11.737	41.744	24.953	1.00	30.73	AAAA
ATOM	486	C	VAL	A	61	10.969	45.370	25.881	1.00	32.08	AAAA
ATOM	487	O	VAL	A	61	11.808	46.105	25.356	1.00	32.55	AAAA
ATOM	488	N	ALA	A	62	10.279	45.725	26.963	1.00	32.54	AAAA
ATOM	489	CA	ALA	A	62	10.453	47.032	27.597	1.00	31.29	AAAA
ATOM	490	CB	ALA	A	62	9.108	47.573	28.023	1.00	30.53	AAAA
ATOM	491	C	ALA	A	62	11.370	46.919	28.792	1.00	30.75	AAAA
ATOM	492	O	ALA	A	62	10.917	46.815	29.921	1.00	33.14	AAAA
ATOM	493	N	GLY	A	63	12.667	46.949	28.538	1.00	29.79	AAAA
ATOM	494	CA	GLY	A	63	13.650	46.816	29.595	1.00	27.43	AAAA
ATOM	495	C	GLY	A	63	14.866	46.392	28.827	1.00	26.51	AAAA
ATOM	496	O	GLY	A	63	14.962	46.769	27.670	1.00	27.91	AAAA
ATOM	497	N	TYR	A	64	15.782	45.622	29.403	1.00	25.00	AAAA
ATOM	498	CA	TYR	A	64	16.937	45.228	28.617	1.00	23.34	AAAA
ATOM	499	CB	TYR	A	64	18.249	45.433	29.381	1.00	24.00	AAAA
ATOM	500	CG	TYR	A	64	18.465	44.577	30.606	1.00	24.14	AAAA
ATOM	501	CD1	TYR	A	64	18.366	43.197	30.551	1.00	24.46	AAAA
ATOM	502	CE1	TYR	A	64	18.594	42.417	31.684	1.00	25.64	AAAA
ATOM	503	CD2	TYR	A	64	18.802	45.159	31.823	1.00	24.96	AAAA
ATOM	504	CE2	TYR	A	64	19.033	44.397	32.954	1.00	23.56	AAAA
ATOM	505	CZ	TYR	A	64	18.923	43.028	32.884	1.00	24.38	AAAA
ATOM	506	OH	TYR	A	64	19.095	42.272	34.022	1.00	25.45	AAAA
ATOM	507	C	TYR	A	64	16.863	43.817	28.091	1.00	22.14	AAAA
ATOM	508	O	TYR	A	64	15.985	43.048	28.457	1.00	23.90	AAAA
ATOM	509	N	VAL	A	65	17.788	43.500	27.197	1.00	21.05	AAAA
ATOM	510	CA	VAL	A	65	17.890	42.186	26.591	1.00	19.44	AAAA
ATOM	511	CB	VAL	A	65	17.488	42.256	25.119	1.00	16.28	AAAA
ATOM	512	CG1	VAL	A	65	17.076	40.917	24.619	1.00	15.67	AAAA
ATOM	513	CG2	VAL	A	65	16.366	43.210	24.964	1.00	16.86	AAAA
ATOM	514	C	VAL	A	65	19.361	41.751	26.751	1.00	20.09	AAAA
ATOM	515	O	VAL	A	65	20.285	42.451	26.356	1.00	19.45	AAAA
ATOM	516	N	LEU	A	66	19.563	40.593	27.362	1.00	21.43	AAAA
ATOM	517	CA	LEU	A	66	20.891	40.070	27.609	1.00	21.99	AAAA
ATOM	518	CB	LEU	A	66	21.111	39.946	29.106	1.00	19.84	AAAA
ATOM	519	CG	LEU	A	66	22.488	39.512	29.573	1.00	19.58	AAAA
ATOM	520	CD1	LEU	A	66	23.529	40.501	29.121	1.00	20.67	AAAA

ATOM	521	CD2	LEU	A	66	22.479	39.417	31.074	1.00	20.90	AAAA
ATOM	522	C	LEU	A	66	20.997	38.708	26.996	1.00	23.81	AAAA
ATOM	523	O	LEU	A	66	20.318	37.804	27.443	1.00	26.39	AAAA
ATOM	524	N	ILE	A	67	21.841	38.557	25.978	1.00	25.38	AAAA
ATOM	525	CA	ILE	A	67	22.043	37.260	25.307	1.00	25.75	AAAA
ATOM	526	CB	ILE	A	67	21.878	37.368	23.767	1.00	23.72	AAAA
ATOM	527	CG2	ILE	A	67	21.812	35.985	23.168	1.00	25.36	AAAA
ATOM	528	CG1	ILE	A	67	20.623	38.146	23.401	1.00	20.31	AAAA
ATOM	529	CD1	ILE	A	67	19.377	37.448	23.750	1.00	19.97	AAAA
ATOM	530	C	ILE	A	67	23.486	36.816	25.565	1.00	26.50	AAAA
ATOM	531	O	ILE	A	67	24.339	36.968	24.689	1.00	27.41	AAAA
ATOM	532	N	ALA	A	68	23.759	36.260	26.745	1.00	26.61	AAAA
ATOM	533	CA	ALA	A	68	25.116	35.845	27.092	1.00	25.89	AAAA
ATOM	534	CB	ALA	A	68	25.653	36.775	28.119	1.00	25.08	AAAA
ATOM	535	C	ALA	A	68	25.304	34.411	27.577	1.00	27.18	AAAA
ATOM	536	O	ALA	A	68	24.430	33.834	28.218	1.00	29.11	AAAA
ATOM	537	N	LEU	A	69	26.470	33.854	27.272	1.00	27.63	AAAA
ATOM	538	CA	LEU	A	69	26.870	32.498	27.671	1.00	28.95	AAAA
ATOM	539	CB	LEU	A	69	26.951	32.385	29.202	1.00	27.52	AAAA
ATOM	540	CG	LEU	A	69	28.211	32.992	29.821	1.00	27.34	AAAA
ATOM	541	CD1	LEU	A	69	28.229	34.480	29.592	1.00	28.42	AAAA
ATOM	542	CD2	LEU	A	69	28.240	32.733	31.290	1.00	26.80	AAAA
ATOM	543	C	LEU	A	69	26.074	31.320	27.129	1.00	30.54	AAAA
ATOM	544	O	LEU	A	69	26.010	30.269	27.761	1.00	31.97	AAAA
ATOM	545	N	ASN	A	70	25.476	31.479	25.955	1.00	32.34	AAAA
ATOM	546	CA	ASN	A	70	24.718	30.386	25.359	1.00	32.63	AAAA
ATOM	547	CB	ASN	A	70	23.464	30.888	24.628	1.00	35.05	AAAA
ATOM	548	CG	ASN	A	70	22.753	32.013	25.354	1.00	37.76	AAAA
ATOM	549	OD1	ASN	A	70	21.527	32.103	25.321	1.00	39.18	AAAA
ATOM	550	ND2	ASN	A	70	23.514	32.892	25.981	1.00	39.20	AAAA
ATOM	551	C	ASN	A	70	25.629	29.716	24.335	1.00	32.01	AAAA
ATOM	552	O	ASN	A	70	26.566	30.328	23.832	1.00	30.46	AAAA
ATOM	553	N	THR	A	71	25.351	28.453	24.041	1.00	32.12	AAAA
ATOM	554	CA	THR	A	71	26.117	27.700	23.058	1.00	32.97	AAAA
ATOM	555	CB	THR	A	71	26.976	26.582	23.731	1.00	32.88	AAAA
ATOM	556	OG1	THR	A	71	26.215	25.923	24.750	1.00	31.78	AAAA
ATOM	557	CG2	THR	A	71	28.240	27.171	24.340	1.00	30.54	AAAA
ATOM	558	C	THR	A	71	25.131	27.097	22.052	1.00	33.38	AAAA
ATOM	559	O	THR	A	71	25.520	26.414	21.107	1.00	34.13	AAAA
ATOM	560	N	VAL	A	72	23.857	27.423	22.258	1.00	33.64	AAAA
ATOM	561	CA	VAL	A	72	22.723	26.964	21.461	1.00	34.99	AAAA
ATOM	562	CB	VAL	A	72	21.443	27.669	21.966	1.00	33.70	AAAA
ATOM	563	CG1	VAL	A	72	21.563	29.144	21.772	1.00	32.79	AAAA
ATOM	564	CG2	VAL	A	72	20.218	27.115	21.278	1.00	33.36	AAAA
ATOM	565	C	VAL	A	72	22.791	27.025	19.914	1.00	36.36	AAAA
ATOM	566	O	VAL	A	72	22.313	26.106	19.241	1.00	38.93	AAAA
ATOM	567	N	GLU	A	73	23.363	28.082	19.350	1.00	36.82	AAAA
ATOM	568	CA	GLU	A	73	23.502	28.217	17.892	1.00	38.28	AAAA
ATOM	569	CB	GLU	A	73	23.625	26.856	17.206	1.00	40.20	AAAA
ATOM	570	CG	GLU	A	73	24.104	26.979	15.767	1.00	43.88	AAAA
ATOM	571	CD	GLU	A	73	23.323	26.111	14.812	1.00	45.83	AAAA
ATOM	572	OE1	GLU	A	73	23.582	26.187	13.590	1.00	45.11	AAAA
ATOM	573	OE2	GLU	A	73	22.450	25.356	15.291	1.00	47.64	AAAA
ATOM	574	C	GLU	A	73	22.436	29.018	17.152	1.00	37.17	AAAA
ATOM	575	O	GLU	A	73	22.731	29.645	16.136	1.00	36.81	AAAA
ATOM	576	N	ARG	A	74	21.196	28.977	17.611	1.00	36.04	AAAA
ATOM	577	CA	ARG	A	74	20.177	29.781	16.954	1.00	37.43	AAAA
ATOM	578	CB	ARG	A	74	19.523	29.036	15.785	1.00	41.27	AAAA
ATOM	579	CG	ARG	A	74	18.540	29.920	14.984	1.00	44.99	AAAA
ATOM	580	CD	ARG	A	74	17.881	29.185	13.813	1.00	48.63	AAAA
ATOM	581	NE	ARG	A	74	17.091	30.075	12.948	1.00	53.74	AAAA
ATOM	582	CZ	ARG	A	74	17.574	30.786	11.923	1.00	55.25	AAAA
ATOM	583	NH1	ARG	A	74	18.863	30.732	11.604	1.00	54.59	AAAA
ATOM	584	NH2	ARG	A	74	16.758	31.551	11.202	1.00	55.29	AAAA
ATOM	585	C	ARG	A	74	19.098	30.238	17.919	1.00	36.71	AAAA
ATOM	586	O	ARG	A	74	18.384	29.418	18.501	1.00	37.88	AAAA
ATOM	587	N	ILE	A	75	18.985	31.552	18.088	1.00	33.95	AAAA
ATOM	588	CA	ILE	A	75	17.979	32.122	18.970	1.00	30.47	AAAA
ATOM	589	CB	ILE	A	75	18.642	33.021	20.041	1.00	29.72	AAAA
ATOM	590	CG2	ILE	A	75	17.663	33.278	21.183	1.00	28.02	AAAA
ATOM	591	CG1	ILE	A	75	19.900	32.331	20.581	1.00	28.06	AAAA
ATOM	592	CD1	ILE	A	75	20.653	33.119	21.650	1.00	27.01	AAAA
ATOM	593	C	ILE	A	75	16.987	32.925	18.110	1.00	27.79	AAAA
ATOM	594	O	ILE	A	75	17.171	34.112	17.871	1.00	27.07	AAAA
ATOM	595	N	PRO	A	76	15.924	32.262	17.628	1.00	24.86	AAAA

ATOM	596	CD	PRO	A	76	15.757	30.822	17.860	1.00	23.69	AAAA
ATOM	597	CA	PRO	A	76	14.834	32.759	16.786	1.00	24.18	AAAA
ATOM	598	CB	PRO	A	76	13.949	31.533	16.629	1.00	23.97	AAAA
ATOM	599	CG	PRO	A	76	14.918	30.424	16.695	1.00	25.20	AAAA
ATOM	600	C	PRO	A	76	14.030	33.973	17.245	1.00	24.42	AAAA
ATOM	601	O	PRO	A	76	12.805	33.912	17.318	1.00	24.47	AAAA
ATOM	602	N	LEU	A	77	14.711	35.074	17.544	1.00	25.42	AAAA
ATOM	603	CA	LEU	A	77	14.046	36.313	17.954	1.00	25.64	AAAA
ATOM	604	CB	LEU	A	77	15.031	37.240	18.687	1.00	23.25	AAAA
ATOM	605	CG	LEU	A	77	15.321	36.875	20.147	1.00	20.92	AAAA
ATOM	606	CD1	LEU	A	77	16.466	37.661	20.707	1.00	20.56	AAAA
ATOM	607	CD2	LEU	A	77	14.092	37.149	20.948	1.00	20.23	AAAA
ATOM	608	C	LEU	A	77	13.548	36.978	16.685	1.00	27.21	AAAA
ATOM	609	O	LEU	A	77	13.666	38.189	16.525	1.00	28.63	AAAA
ATOM	610	N	GLU	A	78	12.987	36.150	15.801	1.00	29.82	AAAA
ATOM	611	CA	GLU	A	78	12.458	36.522	14.476	1.00	31.56	AAAA
ATOM	612	CB	GLU	A	78	12.015	35.248	13.735	1.00	34.12	AAAA
ATOM	613	CG	GLU	A	78	13.154	34.315	13.300	1.00	36.94	AAAA
ATOM	614	CD	GLU	A	78	12.647	33.031	12.647	1.00	38.41	AAAA
ATOM	615	OE1	GLU	A	78	11.427	32.953	12.373	1.00	39.18	AAAA
ATOM	616	OE2	GLU	A	78	13.464	32.106	12.403	1.00	38.07	AAAA
ATOM	617	C	GLU	A	78	11.328	37.563	14.373	1.00	31.51	AAAA
ATOM	618	O	GLU	A	78	11.056	38.082	13.291	1.00	31.01	AAAA
ATOM	619	N	ASN	A	79	10.664	37.868	15.479	1.00	31.85	AAAA
ATOM	620	CA	ASN	A	79	9.587	38.848	15.446	1.00	30.71	AAAA
ATOM	621	CB	ASN	A	79	8.258	38.128	15.528	1.00	32.96	AAAA
ATOM	622	CG	ASN	A	79	7.910	37.463	14.239	1.00	34.38	AAAA
ATOM	623	OD1	ASN	A	79	7.444	38.114	13.311	1.00	36.70	AAAA
ATOM	624	ND2	ASN	A	79	8.160	36.165	14.152	1.00	35.40	AAAA
ATOM	625	C	ASN	A	79	9.656	39.950	16.492	1.00	29.24	AAAA
ATOM	626	O	ASN	A	79	8.651	40.541	16.841	1.00	28.78	AAAA
ATOM	627	N	LEU	A	80	10.862	40.231	16.959	1.00	27.96	AAAA
ATOM	628	CA	LEU	A	80	11.103	41.262	17.947	1.00	27.79	AAAA
ATOM	629	CB	LEU	A	80	12.321	40.866	18.782	1.00	25.97	AAAA
ATOM	630	CG	LEU	A	80	12.742	41.851	19.859	1.00	24.40	AAAA
ATOM	631	CD1	LEU	A	80	11.635	41.897	20.873	1.00	23.83	AAAA
ATOM	632	CD2	LEU	A	80	14.073	41.446	20.488	1.00	22.52	AAAA
ATOM	633	C	LEU	A	80	11.366	42.577	17.204	1.00	29.00	AAAA
ATOM	634	O	LEU	A	80	12.330	42.682	16.451	1.00	27.98	AAAA
ATOM	635	N	GLN	A	81	10.527	43.585	17.429	1.00	30.55	AAAA
ATOM	636	CA	GLN	A	81	10.689	44.865	16.735	1.00	32.18	AAAA
ATOM	637	CB	GLN	A	81	9.367	45.260	16.084	1.00	32.27	AAAA
ATOM	638	CG	GLN	A	81	8.531	44.080	15.677	1.00	32.80	AAAA
ATOM	639	CD	GLN	A	81	7.264	44.493	14.995	1.00	33.64	AAAA
ATOM	640	OE1	GLN	A	81	7.250	44.760	13.794	1.00	35.58	AAAA
ATOM	641	NE2	GLN	A	81	6.184	44.563	15.758	1.00	32.74	AAAA
ATOM	642	C	GLN	A	81	11.175	46.035	17.594	1.00	33.08	AAAA
ATOM	643	O	GLN	A	81	12.093	46.770	17.210	1.00	32.81	AAAA
ATOM	644	N	ILE	A	82	10.556	46.207	18.756	1.00	34.24	AAAA
ATOM	645	CA	ILE	A	82	10.900	47.309	19.645	1.00	34.92	AAAA
ATOM	646	CB	ILE	A	82	9.646	48.184	19.910	1.00	36.44	AAAA
ATOM	647	CG2	ILE	A	82	9.024	47.800	21.241	1.00	35.76	AAAA
ATOM	648	CG1	ILE	A	82	9.998	49.678	19.854	1.00	36.84	AAAA
ATOM	649	CD1	ILE	A	82	10.798	50.196	21.030	1.00	37.63	AAAA
ATOM	650	C	ILE	A	82	11.459	46.832	20.974	1.00	33.83	AAAA
ATOM	651	O	ILE	A	82	10.989	45.852	21.541	1.00	34.78	AAAA
ATOM	652	N	ILE	A	83	12.464	47.548	21.458	1.00	32.77	AAAA
ATOM	653	CA	ILE	A	83	13.118	47.267	22.730	1.00	31.39	AAAA
ATOM	654	CB	ILE	A	83	14.483	46.583	22.492	1.00	30.39	AAAA
ATOM	655	CG2	ILE	A	83	15.342	46.609	23.738	1.00	30.26	AAAA
ATOM	656	CG1	ILE	A	83	14.252	45.148	22.052	1.00	29.08	AAAA
ATOM	657	CD1	ILE	A	83	15.522	44.412	21.789	1.00	30.68	AAAA
ATOM	658	C	ILE	A	83	13.308	48.631	23.393	1.00	31.68	AAAA
ATOM	659	O	ILE	A	83	14.266	49.346	23.103	1.00	31.74	AAAA
ATOM	660	N	ARG	A	84	12.377	48.994	24.270	1.00	32.12	AAAA
ATOM	661	CA	ARG	A	84	12.405	50.288	24.959	1.00	32.91	AAAA
ATOM	662	CB	ARG	A	84	11.093	50.484	25.703	1.00	30.84	AAAA
ATOM	663	CG	ARG	A	84	9.898	50.289	24.820	1.00	31.61	AAAA
ATOM	664	CD	ARG	A	84	8.701	49.785	25.596	1.00	32.83	AAAA
ATOM	665	NE	ARG	A	84	7.632	49.374	24.693	1.00	34.40	AAAA
ATOM	666	CZ	ARG	A	84	6.939	50.209	23.922	1.00	35.66	AAAA
ATOM	667	NH1	ARG	A	84	7.193	51.516	23.946	1.00	34.60	AAAA
ATOM	668	NH2	ARG	A	84	6.001	49.732	23.109	1.00	35.85	AAAA
ATOM	669	C	ARG	A	84	13.565	50.448	25.931	1.00	34.82	AAAA
ATOM	670	O	ARG	A	84	14.094	49.475	26.469	1.00	36.39	AAAA

ATOM	671	N	GLY	A	85	13.967	51.684	26.166	1.00	35.60	AAAA
ATOM	672	CA	GLY	A	85	15.060	51.905	27.094	1.00	37.14	AAAA
ATOM	673	C	GLY	A	85	14.867	51.352	28.499	1.00	37.51	AAAA
ATOM	674	O	GLY	A	85	15.759	50.702	29.026	1.00	38.02	AAAA
ATOM	675	N	ASN	A	86	13.707	51.621	29.097	1.00	38.11	AAAA
ATOM	676	CA	ASN	A	86	13.355	51.190	30.456	1.00	39.08	AAAA
ATOM	677	CB	ASN	A	86	12.390	50.004	30.391	1.00	39.85	AAAA
ATOM	678	CG	ASN	A	86	10.950	50.447	30.139	1.00	41.39	AAAA
ATOM	679	OD1	ASN	A	86	10.659	51.125	29.153	1.00	41.32	AAAA
ATOM	680	ND2	ASN	A	86	10.047	50.073	31.040	1.00	40.05	AAAA
ATOM	681	C	ASN	A	86	14.501	50.905	31.430	1.00	38.81	AAAA
ATOM	682	O	ASN	A	86	14.926	51.803	32.155	1.00	39.22	AAAA
ATOM	683	N	MET	A	87	15.000	49.676	31.470	1.00	38.50	AAAA
ATOM	684	CA	MET	A	87	16.101	49.350	32.377	1.00	38.48	AAAA
ATOM	685	CB	MET	A	87	15.690	48.202	33.297	1.00	39.61	AAAA
ATOM	686	CG	MET	A	87	15.974	48.417	34.782	1.00	40.63	AAAA
ATOM	687	SD	MET	A	87	15.668	46.896	35.760	1.00	40.12	AAAA
ATOM	688	CE	MET	A	87	13.889	46.805	35.657	1.00	40.88	AAAA
ATOM	689	C	MET	A	87	17.356	48.960	31.585	1.00	38.42	AAAA
ATOM	690	O	MET	A	87	17.265	48.390	30.498	1.00	38.31	AAAA
ATOM	691	N	TYR	A	88	18.528	49.270	32.124	1.00	37.21	AAAA
ATOM	692	CA	TYR	A	88	19.769	48.943	31.437	1.00	36.60	AAAA
ATOM	693	CB	TYR	A	88	20.734	50.138	31.426	1.00	36.28	AAAA
ATOM	694	CG	TYR	A	88	20.260	51.359	30.665	1.00	34.62	AAAA
ATOM	695	CD1	TYR	A	88	20.962	52.559	30.743	1.00	32.30	AAAA
ATOM	696	CE1	TYR	A	88	20.498	53.709	30.103	1.00	32.31	AAAA
ATOM	697	CD2	TYR	A	88	19.082	51.333	29.911	1.00	34.80	AAAA
ATOM	698	CE2	TYR	A	88	18.611	52.482	29.265	1.00	34.16	AAAA
ATOM	699	CZ	TYR	A	88	19.324	53.664	29.373	1.00	31.95	AAAA
ATOM	700	OH	TYR	A	88	18.842	54.801	28.791	1.00	28.56	AAAA
ATOM	701	C	TYR	A	88	20.468	47.790	32.112	1.00	36.47	AAAA
ATOM	702	O	TYR	A	88	20.004	47.288	33.126	1.00	37.10	AAAA
ATOM	703	N	TYR	A	89	21.588	47.382	31.521	1.00	37.14	AAAA
ATOM	704	CA	TYR	A	89	22.452	46.311	32.023	1.00	37.27	AAAA
ATOM	705	CB	TYR	A	89	22.516	45.158	31.032	1.00	34.46	AAAA
ATOM	706	CG	TYR	A	89	23.434	44.046	31.466	1.00	31.85	AAAA
ATOM	707	CD1	TYR	A	89	23.038	43.137	32.438	1.00	30.43	AAAA
ATOM	708	CE1	TYR	A	89	23.890	42.131	32.863	1.00	30.51	AAAA
ATOM	709	CD2	TYR	A	89	24.710	43.920	30.923	1.00	30.63	AAAA
ATOM	710	CE2	TYR	A	89	25.573	42.916	31.341	1.00	29.59	AAAA
ATOM	711	CZ	TYR	A	89	25.157	42.027	32.313	1.00	30.44	AAAA
ATOM	712	OH	TYR	A	89	26.005	41.035	32.749	1.00	30.49	AAAA
ATOM	713	C	TYR	A	89	23.834	46.951	32.147	1.00	38.30	AAAA
ATOM	714	O	TYR	A	89	24.257	47.699	31.271	1.00	39.23	AAAA
ATOM	715	N	GLU	A	90	24.549	46.659	33.219	1.00	39.31	AAAA
ATOM	716	CA	GLU	A	90	25.849	47.282	33.413	1.00	41.28	AAAA
ATOM	717	CB	GLU	A	90	26.846	46.842	32.338	1.00	42.64	AAAA
ATOM	718	CG	GLU	A	90	28.292	46.813	32.832	1.00	45.23	AAAA
ATOM	719	CD	GLU	A	90	28.700	48.090	33.567	1.00	47.63	AAAA
ATOM	720	OE1	GLU	A	90	28.988	49.112	32.904	1.00	48.55	AAAA
ATOM	721	OE2	GLU	A	90	28.725	48.079	34.817	1.00	49.12	AAAA
ATOM	722	C	GLU	A	90	25.631	48.799	33.345	1.00	41.78	AAAA
ATOM	723	O	GLU	A	90	26.440	49.550	32.805	1.00	41.97	AAAA
ATOM	724	N	ASN	A	91	24.502	49.230	33.893	1.00	42.79	AAAA
ATOM	725	CA	ASN	A	91	24.132	50.638	33.954	1.00	43.13	AAAA
ATOM	726	CB	ASN	A	91	24.911	51.338	35.085	1.00	42.24	AAAA
ATOM	727	CG	ASN	A	91	26.412	51.309	34.873	0.01	42.09	AAAA
ATOM	728	OD1	ASN	A	91	26.926	51.869	33.905	0.01	41.87	AAAA
ATOM	729	ND2	ASN	A	91	27.125	50.650	35.780	0.01	41.86	AAAA
ATOM	730	C	ASN	A	91	24.297	51.435	32.666	1.00	42.99	AAAA
ATOM	731	O	ASN	A	91	24.582	52.626	32.726	1.00	44.32	AAAA
ATOM	732	N	SER	A	92	24.100	50.812	31.508	1.00	42.43	AAAA
ATOM	733	CA	SER	A	92	24.255	51.557	30.254	1.00	42.25	AAAA
ATOM	734	CB	SER	A	92	25.677	52.125	30.172	1.00	42.40	AAAA
ATOM	735	OG	SER	A	92	26.646	51.151	30.530	1.00	39.37	AAAA
ATOM	736	C	SER	A	92	23.942	50.815	28.948	1.00	42.54	AAAA
ATOM	737	O	SER	A	92	24.383	51.247	27.880	1.00	42.23	AAAA
ATOM	738	N	TYR	A	93	23.171	49.727	29.023	1.00	40.92	AAAA
ATOM	739	CA	TYR	A	93	22.839	48.947	27.832	1.00	38.24	AAAA
ATOM	740	CB	TYR	A	93	23.841	47.801	27.684	1.00	36.16	AAAA
ATOM	741	CG	TYR	A	93	25.268	48.261	27.565	1.00	35.11	AAAA
ATOM	742	CD1	TYR	A	93	26.192	47.980	28.564	1.00	35.09	AAAA
ATOM	743	CE1	TYR	A	93	27.523	48.400	28.457	1.00	35.76	AAAA
ATOM	744	CD2	TYR	A	93	25.699	48.979	26.445	1.00	34.95	AAAA
ATOM	745	CE2	TYR	A	93	27.027	49.407	26.325	1.00	35.53	AAAA

ATOM	746	CZ	TYR	A	93	27.934	49.112	27.337	1.00	35.78	AAAA
ATOM	747	OH	TYR	A	93	29.241	49.526	27.232	1.00	34.90	AAAA
ATOM	748	C	TYR	A	93	21.418	48.377	27.763	1.00	37.14	AAAA
ATOM	749	O	TYR	A	93	20.928	47.791	28.728	1.00	38.33	AAAA
ATOM	750	N	ALA	A	94	20.769	48.537	26.608	1.00	35.58	AAAA
ATOM	751	CA	ALA	A	94	19.411	48.013	26.381	1.00	33.66	AAAA
ATOM	752	CB	ALA	A	94	18.623	48.956	25.469	1.00	32.41	AAAA
ATOM	753	C	ALA	A	94	19.504	46.622	25.744	1.00	31.83	AAAA
ATOM	754	O	ALA	A	94	18.567	45.834	25.773	1.00	31.41	AAAA
ATOM	755	N	LEU	A	95	20.657	46.342	25.161	1.00	29.75	AAAA
ATOM	756	CA	LEU	A	95	20.911	45.074	24.531	1.00	27.85	AAAA
ATOM	757	CB	LEU	A	95	20.545	45.126	23.050	1.00	25.92	AAAA
ATOM	758	CG	LEU	A	95	20.711	43.789	22.319	1.00	25.61	AAAA
ATOM	759	CD1	LEU	A	95	19.491	42.913	22.558	1.00	25.08	AAAA
ATOM	760	CD2	LEU	A	95	20.901	44.033	20.839	1.00	25.24	AAAA
ATOM	761	C	LEU	A	95	22.399	44.775	24.690	1.00	28.58	AAAA
ATOM	762	O	LEU	A	95	23.259	45.544	24.256	1.00	27.58	AAAA
ATOM	763	N	ALA	A	96	22.689	43.654	25.331	1.00	27.85	AAAA
ATOM	764	CA	ALA	A	96	24.047	43.225	25.545	1.00	28.01	AAAA
ATOM	765	CB	ALA	A	96	24.382	43.321	26.998	1.00	28.68	AAAA
ATOM	766	C	ALA	A	96	24.081	41.787	25.095	1.00	29.54	AAAA
ATOM	767	O	ALA	A	96	23.260	40.986	25.530	1.00	30.65	AAAA
ATOM	768	N	VAL	A	97	25.017	41.460	24.214	1.00	30.69	AAAA
ATOM	769	CA	VAL	A	97	25.149	40.102	23.700	1.00	31.69	AAAA
ATOM	770	CB	VAL	A	97	24.672	40.040	22.253	1.00	30.69	AAAA
ATOM	771	CG1	VAL	A	97	24.861	38.641	21.701	1.00	32.42	AAAA
ATOM	772	CG2	VAL	A	97	23.215	40.460	22.185	1.00	29.15	AAAA
ATOM	773	C	VAL	A	97	26.607	39.672	23.772	1.00	33.35	AAAA
ATOM	774	O	VAL	A	97	27.391	40.008	22.892	1.00	34.41	AAAA
ATOM	775	N	LEU	A	98	26.970	38.912	24.803	1.00	35.33	AAAA
ATOM	776	CA	LEU	A	98	28.366	38.507	24.970	1.00	37.05	AAAA
ATOM	777	CB	LEU	A	98	29.067	39.530	25.850	1.00	36.35	AAAA
ATOM	778	CG	LEU	A	98	28.399	39.649	27.214	1.00	36.44	AAAA
ATOM	779	CD1	LEU	A	98	29.343	40.340	28.150	1.00	39.31	AAAA
ATOM	780	CD2	LEU	A	98	27.099	40.395	27.110	1.00	34.27	AAAA
ATOM	781	C	LEU	A	98	28.656	37.111	25.532	1.00	37.15	AAAA
ATOM	782	O	LEU	A	98	27.812	36.497	26.164	1.00	37.68	AAAA
ATOM	783	N	SER	A	99	29.882	36.647	25.297	1.00	37.89	AAAA
ATOM	784	CA	SER	A	99	30.381	35.347	25.752	1.00	39.28	AAAA
ATOM	785	CB	SER	A	99	30.566	35.345	27.270	1.00	39.69	AAAA
ATOM	786	OG	SER	A	99	31.755	36.015	27.640	1.00	41.78	AAAA
ATOM	787	C	SER	A	99	29.581	34.111	25.368	1.00	39.72	AAAA
ATOM	788	O	SER	A	99	29.252	33.297	26.231	1.00	40.19	AAAA
ATOM	789	N	ASN	A	100	29.299	33.942	24.082	1.00	39.73	AAAA
ATOM	790	CA	ASN	A	100	28.533	32.788	23.641	1.00	40.30	AAAA
ATOM	791	CB	ASN	A	100	27.406	33.241	22.722	1.00	38.71	AAAA
ATOM	792	CG	ASN	A	100	26.452	34.171	23.409	1.00	38.04	AAAA
ATOM	793	OD1	ASN	A	100	25.653	33.749	24.238	1.00	38.80	AAAA
ATOM	794	ND2	ASN	A	100	26.538	35.454	23.085	1.00	37.28	AAAA
ATOM	795	C	ASN	A	100	29.364	31.727	22.932	1.00	42.18	AAAA
ATOM	796	O	ASN	A	100	29.448	31.722	21.706	1.00	41.45	AAAA
ATOM	797	N	TYR	A	101	29.975	30.831	23.703	1.00	44.15	AAAA
ATOM	798	CA	TYR	A	101	30.758	29.754	23.122	1.00	46.78	AAAA
ATOM	799	CB	TYR	A	101	31.777	30.315	22.144	1.00	45.43	AAAA
ATOM	800	CG	TYR	A	101	32.922	31.045	22.776	1.00	45.60	AAAA
ATOM	801	CD1	TYR	A	101	34.153	30.418	22.950	1.00	44.05	AAAA
ATOM	802	CE1	TYR	A	101	35.236	31.104	23.461	1.00	44.75	AAAA
ATOM	803	CD2	TYR	A	101	32.801	32.384	23.146	1.00	45.05	AAAA
ATOM	804	CE2	TYR	A	101	33.882	33.082	23.662	1.00	44.69	AAAA
ATOM	805	CZ	TYR	A	101	35.098	32.438	23.812	1.00	45.02	AAAA
ATOM	806	OH	TYR	A	101	36.191	33.129	24.281	1.00	46.14	AAAA
ATOM	807	C	TYR	A	101	31.442	28.844	24.130	1.00	49.76	AAAA
ATOM	808	O	TYR	A	101	32.094	29.300	25.065	1.00	50.57	AAAA
ATOM	809	N	ASP	A	102	31.278	27.543	23.903	1.00	53.43	AAAA
ATOM	810	CA	ASP	A	102	31.812	26.455	24.731	1.00	55.07	AAAA
ATOM	811	CB	ASP	A	102	31.319	25.128	24.136	1.00	57.28	AAAA
ATOM	812	CG	ASP	A	102	31.684	23.926	24.976	1.00	60.32	AAAA
ATOM	813	OD1	ASP	A	102	31.497	22.783	24.490	1.00	60.66	AAAA
ATOM	814	OD2	ASP	A	102	32.150	24.119	26.119	1.00	62.13	AAAA
ATOM	815	C	ASP	A	102	33.342	26.438	24.835	1.00	55.45	AAAA
ATOM	816	O	ASP	A	102	33.975	25.450	24.455	1.00	55.96	AAAA
ATOM	817	N	ALA	A	103	33.937	27.511	25.357	1.00	55.49	AAAA
ATOM	818	CA	ALA	A	103	35.397	27.590	25.480	1.00	55.53	AAAA
ATOM	819	CB	ALA	A	103	35.885	26.683	26.604	1.00	55.63	AAAA
ATOM	820	C	ALA	A	103	36.033	27.168	24.160	1.00	55.47	AAAA

ATOM	821	O	ALA	A	103	36.454	26.025	23.997	1.00	53.87	AAAA
ATOM	822	N	ASN	A	104	36.092	28.108	23.224	1.00	57.03	AAAA
ATOM	823	CA	ASN	A	104	36.644	27.871	21.892	1.00	58.71	AAAA
ATOM	824	CB	ASN	A	104	38.180	27.935	21.914	1.00	61.29	AAAA
ATOM	825	CG	ASN	A	104	38.704	29.366	21.998	1.00	64.22	AAAA
ATOM	826	OD1	ASN	A	104	38.367	30.213	21.164	1.00	65.07	AAAA
ATOM	827	ND2	ASN	A	104	39.532	29.641	23.006	1.00	65.35	AAAA
ATOM	828	C	ASN	A	104	36.190	26.542	21.313	1.00	57.81	AAAA
ATOM	829	O	ASN	A	104	36.834	25.514	21.527	1.00	59.57	AAAA
ATOM	830	N	LYS	A	105	35.078	26.573	20.583	1.00	55.91	AAAA
ATOM	831	CA	LYS	A	105	34.518	25.380	19.956	1.00	54.19	AAAA
ATOM	832	CB	LYS	A	105	34.362	24.249	20.976	1.00	54.32	AAAA
ATOM	833	CG	LYS	A	105	33.866	22.938	20.385	0.01	54.09	AAAA
ATOM	834	CD	LYS	A	105	33.719	21.865	21.455	0.01	54.03	AAAA
ATOM	835	CE	LYS	A	105	35.052	21.542	22.113	0.01	53.94	AAAA
ATOM	836	NZ	LYS	A	105	34.911	20.497	23.164	0.01	54.04	AAAA
ATOM	837	C	LYS	A	105	33.157	25.695	19.372	1.00	53.14	AAAA
ATOM	838	O	LYS	A	105	33.041	26.131	18.227	1.00	53.20	AAAA
ATOM	839	N	THR	A	106	32.129	25.469	20.180	1.00	51.70	AAAA
ATOM	840	CA	THR	A	106	30.753	25.706	19.775	1.00	50.34	AAAA
ATOM	841	CB	THR	A	106	29.835	24.546	20.220	1.00	51.16	AAAA
ATOM	842	OG1	THR	A	106	30.260	24.052	21.501	1.00	51.81	AAAA
ATOM	843	CG2	THR	A	106	29.865	23.425	19.199	1.00	50.99	AAAA
ATOM	844	C	THR	A	106	30.224	26.995	20.375	1.00	49.20	AAAA
ATOM	845	O	THR	A	106	30.828	27.540	21.295	1.00	49.47	AAAA
ATOM	846	N	GLY	A	107	29.094	27.468	19.851	1.00	47.30	AAAA
ATOM	847	CA	GLY	A	107	28.492	28.693	20.344	1.00	44.60	AAAA
ATOM	848	C	GLY	A	107	27.376	29.234	19.472	1.00	42.43	AAAA
ATOM	849	O	GLY	A	107	26.945	28.581	18.533	1.00	42.85	AAAA
ATOM	850	N	LEU	A	108	26.902	30.433	19.796	1.00	40.49	AAAA
ATOM	851	CA	LEU	A	108	25.832	31.077	19.043	1.00	37.67	AAAA
ATOM	852	CB	LEU	A	108	25.394	32.367	19.732	1.00	36.76	AAAA
ATOM	853	CG	LEU	A	108	24.414	33.227	18.936	1.00	34.90	AAAA
ATOM	854	CD1	LEU	A	108	23.123	32.464	18.711	1.00	36.26	AAAA
ATOM	855	CD2	LEU	A	108	24.136	34.506	19.685	1.00	35.04	AAAA
ATOM	856	C	LEU	A	108	26.317	31.406	17.645	1.00	36.67	AAAA
ATOM	857	O	LEU	A	108	27.351	32.052	17.482	1.00	35.35	AAAA
ATOM	858	N	LYS	A	109	25.554	30.968	16.646	1.00	35.68	AAAA
ATOM	859	CA	LYS	A	109	25.894	31.194	15.241	1.00	34.01	AAAA
ATOM	860	CB	LYS	A	109	25.906	29.858	14.489	1.00	33.16	AAAA
ATOM	861	CG	LYS	A	109	26.106	29.984	12.987	0.01	32.65	AAAA
ATOM	862	CD	LYS	A	109	25.961	28.636	12.298	0.01	32.15	AAAA
ATOM	863	CE	LYS	A	109	26.085	28.771	10.790	0.01	31.80	AAAA
ATOM	864	NZ	LYS	A	109	25.062	29.696	10.230	0.01	31.82	AAAA
ATOM	865	C	LYS	A	109	24.971	32.174	14.509	1.00	32.32	AAAA
ATOM	866	O	LYS	A	109	25.442	33.020	13.764	1.00	31.48	AAAA
ATOM	867	N	GLU	A	110	23.665	32.063	14.727	1.00	31.17	AAAA
ATOM	868	CA	GLU	A	110	22.706	32.930	14.053	1.00	30.16	AAAA
ATOM	869	CB	GLU	A	110	21.964	32.120	12.966	1.00	29.58	AAAA
ATOM	870	CG	GLU	A	110	21.738	30.637	13.310	1.00	28.34	AAAA
ATOM	871	CD	GLU	A	110	21.633	29.717	12.088	1.00	29.05	AAAA
ATOM	872	OE1	GLU	A	110	22.625	29.630	11.326	1.00	27.77	AAAA
ATOM	873	OE2	GLU	A	110	20.570	29.067	11.893	1.00	27.06	AAAA
ATOM	874	C	GLU	A	110	21.728	33.615	15.008	1.00	29.15	AAAA
ATOM	875	O	GLU	A	110	21.133	32.974	15.866	1.00	28.91	AAAA
ATOM	876	N	LEU	A	111	21.577	34.930	14.844	1.00	29.75	AAAA
ATOM	877	CA	LEU	A	111	20.700	35.760	15.685	1.00	29.37	AAAA
ATOM	878	CB	LEU	A	111	21.593	36.736	16.465	1.00	28.95	AAAA
ATOM	879	CG	LEU	A	111	21.203	37.350	17.815	1.00	29.26	AAAA
ATOM	880	CD1	LEU	A	111	20.664	36.292	18.751	1.00	28.31	AAAA
ATOM	881	CD2	LEU	A	111	22.424	38.032	18.426	1.00	27.87	AAAA
ATOM	882	C	LEU	A	111	19.682	36.515	14.799	1.00	29.14	AAAA
ATOM	883	O	LEU	A	111	19.685	37.727	14.733	1.00	29.76	AAAA
ATOM	884	N	PRO	A	112	18.774	35.784	14.141	1.00	29.32	AAAA
ATOM	885	CD	PRO	A	112	18.521	34.410	14.602	1.00	30.38	AAAA
ATOM	886	CA	PRO	A	112	17.708	36.208	13.223	1.00	29.44	AAAA
ATOM	887	CB	PRO	A	112	16.864	34.945	13.059	1.00	29.55	AAAA
ATOM	888	CG	PRO	A	112	17.770	33.835	13.460	1.00	30.58	AAAA
ATOM	889	C	PRO	A	112	16.812	37.382	13.608	1.00	30.66	AAAA
ATOM	890	O	PRO	A	112	15.613	37.332	13.340	1.00	31.52	AAAA
ATOM	891	N	MET	A	113	17.355	38.433	14.206	1.00	31.27	AAAA
ATOM	892	CA	MET	A	113	16.521	39.569	14.623	1.00	32.48	AAAA
ATOM	893	CB	MET	A	113	17.237	40.363	15.716	1.00	34.12	AAAA
ATOM	894	CG	MET	A	113	16.814	39.990	17.133	1.00	34.12	AAAA
ATOM	895	SD	MET	A	113	18.142	40.231	18.302	1.00	34.37	AAAA

ATOM	896	CE	MET	A	113	18.540	38.605	18.527	1.00	31.86	AAAA
ATOM	897	C	MET	A	113	16.122	40.508	13.496	1.00	32.25	AAAA
ATOM	898	O	MET	A	113	16.273	41.725	13.604	1.00	32.96	AAAA
ATOM	899	N	ARG	A	114	15.584	39.936	12.429	1.00	30.75	AAAA
ATOM	900	CA	ARG	A	114	15.187	40.699	11.258	1.00	29.68	AAAA
ATOM	901	CB	ARG	A	114	14.975	39.761	10.075	1.00	29.99	AAAA
ATOM	902	CG	ARG	A	114	13.609	39.120	10.002	1.00	26.27	AAAA
ATOM	903	CD	ARG	A	114	13.308	38.244	11.189	1.00	25.95	AAAA
ATOM	904	NE	ARG	A	114	12.371	37.210	10.788	1.00	27.20	AAAA
ATOM	905	CZ	ARG	A	114	12.675	36.213	9.959	1.00	28.14	AAAA
ATOM	906	NH1	ARG	A	114	13.904	36.111	9.455	1.00	26.67	AAAA
ATOM	907	NH2	ARG	A	114	11.736	35.346	9.603	1.00	25.33	AAAA
ATOM	908	C	ARG	A	114	13.964	41.590	11.397	1.00	29.51	AAAA
ATOM	909	O	ARG	A	114	13.412	42.032	10.391	1.00	29.74	AAAA
ATOM	910	N	ASN	A	115	13.526	41.850	12.621	1.00	28.25	AAAA
ATOM	911	CA	ASN	A	115	12.382	42.735	12.815	1.00	28.00	AAAA
ATOM	912	CB	ASN	A	115	11.153	41.935	13.198	1.00	25.20	AAAA
ATOM	913	CG	ASN	A	115	10.370	41.502	12.007	1.00	24.22	AAAA
ATOM	914	OD1	ASN	A	115	9.768	40.434	11.998	1.00	25.29	AAAA
ATOM	915	ND2	ASN	A	115	10.361	42.334	10.984	1.00	24.89	AAAA
ATOM	916	C	ASN	A	115	12.677	43.801	13.861	1.00	29.87	AAAA
ATOM	917	O	ASN	A	115	11.947	44.780	14.006	1.00	30.09	AAAA
ATOM	918	N	LEU	A	116	13.764	43.597	14.585	1.00	31.01	AAAA
ATOM	919	CA	LEU	A	116	14.181	44.537	15.596	1.00	32.63	AAAA
ATOM	920	CB	LEU	A	116	15.425	44.003	16.296	1.00	31.13	AAAA
ATOM	921	CG	LEU	A	116	15.995	44.889	17.383	1.00	28.76	AAAA
ATOM	922	CD1	LEU	A	116	14.988	44.969	18.504	1.00	27.83	AAAA
ATOM	923	CD2	LEU	A	116	17.319	44.325	17.860	1.00	29.92	AAAA
ATOM	924	C	LEU	A	116	14.503	45.810	14.830	1.00	34.82	AAAA
ATOM	925	O	LEU	A	116	15.484	45.863	14.089	1.00	36.01	AAAA
ATOM	926	N	GLN	A	117	13.689	46.842	14.994	1.00	36.10	AAAA
ATOM	927	CA	GLN	A	117	13.944	48.064	14.252	1.00	37.88	AAAA
ATOM	928	CB	GLN	A	117	12.828	48.274	13.234	1.00	37.50	AAAA
ATOM	929	CG	GLN	A	117	12.829	47.184	12.196	1.00	40.04	AAAA
ATOM	930	CD	GLN	A	117	11.779	47.377	11.148	1.00	42.95	AAAA
ATOM	931	OE1	GLN	A	117	11.586	48.484	10.646	1.00	45.75	AAAA
ATOM	932	NE2	GLN	A	117	11.092	46.296	10.792	1.00	43.71	AAAA
ATOM	933	C	GLN	A	117	14.154	49.321	15.070	1.00	38.45	AAAA
ATOM	934	O	GLN	A	117	14.638	50.320	14.547	1.00	39.48	AAAA
ATOM	935	N	GLU	A	118	13.823	49.265	16.353	1.00	38.74	AAAA
ATOM	936	CA	GLU	A	118	13.971	50.427	17.210	1.00	38.23	AAAA
ATOM	937	CB	GLU	A	118	12.683	51.251	17.164	1.00	38.15	AAAA
ATOM	938	CG	GLU	A	118	12.649	52.448	18.097	1.00	39.43	AAAA
ATOM	939	CD	GLU	A	118	13.610	53.542	17.682	1.00	41.05	AAAA
ATOM	940	OE1	GLU	A	118	13.502	54.009	16.529	1.00	42.73	AAAA
ATOM	941	OE2	GLU	A	118	14.464	53.937	18.505	1.00	39.66	AAAA
ATOM	942	C	GLU	A	118	14.308	50.082	18.660	1.00	38.25	AAAA
ATOM	943	O	GLU	A	118	13.678	49.212	19.278	1.00	38.68	AAAA
ATOM	944	N	ILE	A	119	15.320	50.768	19.181	1.00	36.89	AAAA
ATOM	945	CA	ILE	A	119	15.764	50.628	20.563	1.00	35.34	AAAA
ATOM	946	CB	ILE	A	119	17.229	50.153	20.661	1.00	36.18	AAAA
ATOM	947	CG2	ILE	A	119	17.670	50.107	22.111	1.00	35.24	AAAA
ATOM	948	CG1	ILE	A	119	17.374	48.767	20.034	1.00	37.14	AAAA
ATOM	949	CD1	ILE	A	119	18.776	48.187	20.146	1.00	36.91	AAAA
ATOM	950	C	ILE	A	119	15.669	52.052	21.101	1.00	34.22	AAAA
ATOM	951	O	ILE	A	119	16.617	52.831	21.005	1.00	32.90	AAAA
ATOM	952	N	LEU	A	120	14.506	52.388	21.646	1.00	33.33	AAAA
ATOM	953	CA	LEU	A	120	14.255	53.716	22.178	1.00	33.63	AAAA
ATOM	954	CB	LEU	A	120	12.908	53.713	22.919	1.00	31.58	AAAA
ATOM	955	CG	LEU	A	120	11.713	53.218	22.058	1.00	30.79	AAAA
ATOM	956	CD1	LEU	A	120	10.426	53.174	22.855	1.00	29.83	AAAA
ATOM	957	CD2	LEU	A	120	11.513	54.118	20.871	1.00	30.80	AAAA
ATOM	958	C	LEU	A	120	15.407	54.229	23.055	1.00	35.35	AAAA
ATOM	959	O	LEU	A	120	16.473	54.581	22.540	1.00	35.42	AAAA
ATOM	960	N	HIS	A	121	15.216	54.277	24.366	1.00	37.12	AAAA
ATOM	961	CA	HIS	A	121	16.282	54.756	25.251	1.00	38.24	AAAA
ATOM	962	CB	HIS	A	121	15.686	55.154	26.623	1.00	39.82	AAAA
ATOM	963	CG	HIS	A	121	14.407	55.942	26.541	1.00	41.46	AAAA
ATOM	964	CD2	HIS	A	121	14.131	57.233	26.846	1.00	43.26	AAAA
ATOM	965	ND1	HIS	A	121	13.224	55.404	26.077	1.00	42.51	AAAA
ATOM	966	CE1	HIS	A	121	12.279	56.329	26.096	1.00	42.63	AAAA
ATOM	967	NE2	HIS	A	121	12.802	57.449	26.557	1.00	42.96	AAAA
ATOM	968	C	HIS	A	121	17.295	53.607	25.422	1.00	38.60	AAAA
ATOM	969	O	HIS	A	121	16.918	52.452	25.257	1.00	39.83	AAAA
ATOM	970	N	GLY	A	122	18.567	53.908	25.713	1.00	38.05	AAAA

ATOM	971	CA	GLY	A	122	19.564	52.852	25.937	1.00	36.52	AAAA
ATOM	972	C	GLY	A	122	20.525	52.413	24.831	1.00	35.69	AAAA
ATOM	973	O	GLY	A	122	20.175	52.400	23.657	1.00	35.02	AAAA
ATOM	974	N	ALA	A	123	21.741	52.018	25.206	1.00	35.54	AAAA
ATOM	975	CA	ALA	A	123	22.745	51.593	24.220	1.00	35.46	AAAA
ATOM	976	CB	ALA	A	123	24.096	52.193	24.570	1.00	35.63	AAAA
ATOM	977	C	ALA	A	123	22.891	50.075	24.048	1.00	35.18	AAAA
ATOM	978	O	ALA	A	123	22.214	49.302	24.717	1.00	34.77	AAAA
ATOM	979	N	VAL	A	124	23.786	49.661	23.147	1.00	34.53	AAAA
ATOM	980	CA	VAL	A	124	24.026	48.241	22.877	1.00	33.64	AAAA
ATOM	981	CB	VAL	A	124	23.438	47.845	21.500	1.00	33.47	AAAA
ATOM	982	CG1	VAL	A	124	23.556	46.353	21.289	1.00	34.26	AAAA
ATOM	983	CG2	VAL	A	124	21.981	48.266	21.417	1.00	32.39	AAAA
ATOM	984	C	VAL	A	124	25.523	47.878	22.922	1.00	33.14	AAAA
ATOM	985	O	VAL	A	124	26.380	48.699	22.612	1.00	32.68	AAAA
ATOM	986	N	ARG	A	125	25.827	46.642	23.315	1.00	32.99	AAAA
ATOM	987	CA	ARG	A	125	27.214	46.174	23.419	1.00	32.12	AAAA
ATOM	988	CB	ARG	A	125	27.705	46.338	24.858	1.00	30.91	AAAA
ATOM	989	CG	ARG	A	125	29.027	45.679	25.174	1.00	30.31	AAAA
ATOM	990	CD	ARG	A	125	29.440	45.966	26.613	1.00	30.90	AAAA
ATOM	991	NE	ARG	A	125	30.263	44.903	27.186	1.00	33.10	AAAA
ATOM	992	CZ	ARG	A	125	31.495	44.596	26.789	1.00	34.73	AAAA
ATOM	993	NH1	ARG	A	125	32.070	45.276	25.808	1.00	37.47	AAAA
ATOM	994	NH2	ARG	A	125	32.153	43.598	27.368	1.00	34.41	AAAA
ATOM	995	C	ARG	A	125	27.394	44.718	22.995	1.00	32.55	AAAA
ATOM	996	O	ARG	A	125	26.550	43.867	23.276	1.00	32.66	AAAA
ATOM	997	N	PHE	A	126	28.500	44.446	22.311	1.00	33.29	AAAA
ATOM	998	CA	PHE	A	126	28.838	43.097	21.856	1.00	33.81	AAAA
ATOM	999	CB	PHE	A	126	28.693	42.969	20.325	1.00	34.48	AAAA
ATOM	1000	CG	PHE	A	126	27.313	42.558	19.857	1.00	34.94	AAAA
ATOM	1001	CD1	PHE	A	126	26.272	43.482	19.797	1.00	34.51	AAAA
ATOM	1002	CD2	PHE	A	126	27.057	41.242	19.478	1.00	34.48	AAAA
ATOM	1003	CE1	PHE	A	126	24.999	43.102	19.366	1.00	33.90	AAAA
ATOM	1004	CE2	PHE	A	126	25.788	40.855	19.048	1.00	34.28	AAAA
ATOM	1005	CZ	PHE	A	126	24.758	41.789	18.992	1.00	33.85	AAAA
ATOM	1006	C	PHE	A	126	30.290	42.786	22.232	1.00	34.31	AAAA
ATOM	1007	O	PHE	A	126	31.115	43.695	22.353	1.00	35.00	AAAA
ATOM	1008	N	SER	A	127	30.590	41.503	22.422	1.00	34.46	AAAA
ATOM	1009	CA	SER	A	127	31.946	41.042	22.742	1.00	34.03	AAAA
ATOM	1010	CB	SER	A	127	32.572	41.880	23.866	1.00	35.24	AAAA
ATOM	1011	OG	SER	A	127	31.866	41.741	25.080	1.00	39.63	AAAA
ATOM	1012	C	SER	A	127	32.005	39.558	23.108	1.00	31.55	AAAA
ATOM	1013	O	SER	A	127	31.211	39.068	23.906	1.00	29.87	AAAA
ATOM	1014	N	ASN	A	128	32.962	38.864	22.500	1.00	30.22	AAAA
ATOM	1015	CA	ASN	A	128	33.195	37.438	22.689	1.00	30.10	AAAA
ATOM	1016	CB	ASN	A	128	33.532	37.139	24.153	1.00	31.19	AAAA
ATOM	1017	CG	ASN	A	128	34.819	37.827	24.617	1.00	32.24	AAAA
ATOM	1018	OD1	ASN	A	128	34.783	38.733	25.454	1.00	34.03	AAAA
ATOM	1019	ND2	ASN	A	128	35.957	37.398	24.075	1.00	31.76	AAAA
ATOM	1020	C	ASN	A	128	32.055	36.537	22.198	1.00	30.09	AAAA
ATOM	1021	O	ASN	A	128	31.381	35.859	22.971	1.00	28.96	AAAA
ATOM	1022	N	ASN	A	129	31.860	36.549	20.885	1.00	30.76	AAAA
ATOM	1023	CA	ASN	A	129	30.857	35.738	20.203	1.00	30.82	AAAA
ATOM	1024	CB	ASN	A	129	29.670	36.596	19.766	1.00	30.29	AAAA
ATOM	1025	CG	ASN	A	129	29.047	37.351	20.905	1.00	30.62	AAAA
ATOM	1026	OD1	ASN	A	129	28.534	36.756	21.847	1.00	31.15	AAAA
ATOM	1027	ND2	ASN	A	129	29.086	38.677	20.826	1.00	29.57	AAAA
ATOM	1028	C	ASN	A	129	31.582	35.225	18.957	1.00	31.45	AAAA
ATOM	1029	O	ASN	A	129	31.215	35.559	17.837	1.00	32.78	AAAA
ATOM	1030	N	PRO	A	130	32.624	34.407	19.138	1.00	31.25	AAAA
ATOM	1031	CD	PRO	A	130	33.289	34.048	20.396	1.00	30.90	AAAA
ATOM	1032	CA	PRO	A	130	33.376	33.884	18.002	1.00	32.41	AAAA
ATOM	1033	CB	PRO	A	130	34.607	33.281	18.670	1.00	32.54	AAAA
ATOM	1034	CG	PRO	A	130	34.706	34.039	19.974	1.00	31.82	AAAA
ATOM	1035	C	PRO	A	130	32.634	32.875	17.127	1.00	33.71	AAAA
ATOM	1036	O	PRO	A	130	33.219	31.905	16.651	1.00	35.01	AAAA
ATOM	1037	N	ALA	A	131	31.354	33.109	16.893	1.00	33.82	AAAA
ATOM	1038	CA	ALA	A	131	30.585	32.193	16.078	1.00	34.58	AAAA
ATOM	1039	CB	ALA	A	131	30.143	31.021	16.923	1.00	35.10	AAAA
ATOM	1040	C	ALA	A	131	29.377	32.904	15.489	1.00	35.70	AAAA
ATOM	1041	O	ALA	A	131	28.722	32.407	14.570	1.00	35.03	AAAA
ATOM	1042	N	LEU	A	132	29.095	34.081	16.030	1.00	36.27	AAAA
ATOM	1043	CA	LEU	A	132	27.965	34.870	15.591	1.00	36.85	AAAA
ATOM	1044	CB	LEU	A	132	27.874	36.132	16.444	1.00	33.38	AAAA
ATOM	1045	CG	LEU	A	132	26.587	36.928	16.293	1.00	33.30	AAAA

ATOM	1046	CD1	LEU	A	132	25.393	36.041	16.562	1.00	32.65	AAAA
ATOM	1047	CD2	LEU	A	132	26.607	38.097	17.241	1.00	33.69	AAAA
ATOM	1048	C	LEU	A	132	28.165	35.222	14.127	1.00	39.24	AAAA
ATOM	1049	O	LEU	A	132	29.201	35.772	13.766	1.00	41.29	AAAA
ATOM	1050	N	CYS	A	133	27.188	34.892	13.282	1.00	41.16	AAAA
ATOM	1051	CA	CYS	A	133	27.264	35.191	11.848	1.00	41.90	AAAA
ATOM	1052	C	CYS	A	133	26.405	36.369	11.421	1.00	41.88	AAAA
ATOM	1053	O	CYS	A	133	25.311	36.582	11.941	1.00	41.43	AAAA
ATOM	1054	CB	CYS	A	133	26.815	34.002	10.999	1.00	42.67	AAAA
ATOM	1055	SG	CYS	A	133	28.000	32.654	10.741	1.00	47.30	AAAA
ATOM	1056	N	ASN	A	134	26.918	37.118	10.454	1.00	42.64	AAAA
ATOM	1057	CA	ASN	A	134	26.204	38.242	9.874	1.00	44.09	AAAA
ATOM	1058	CB	ASN	A	134	25.002	37.724	9.077	1.00	44.56	AAAA
ATOM	1059	CG	ASN	A	134	25.404	37.075	7.770	1.00	45.17	AAAA
ATOM	1060	OD1	ASN	A	134	25.495	35.852	7.674	1.00	44.80	AAAA
ATOM	1061	ND2	ASN	A	134	25.661	37.900	6.754	1.00	44.86	AAAA
ATOM	1062	C	ASN	A	134	25.718	39.373	10.764	1.00	44.64	AAAA
ATOM	1063	O	ASN	A	134	24.926	40.195	10.306	1.00	44.22	AAAA
ATOM	1064	N	VAL	A	135	26.155	39.439	12.017	1.00	45.70	AAAA
ATOM	1065	CA	VAL	A	135	25.674	40.524	12.870	1.00	45.89	AAAA
ATOM	1066	CB	VAL	A	135	25.519	40.068	14.343	1.00	46.97	AAAA
ATOM	1067	CG1	VAL	A	135	25.587	41.260	15.292	1.00	48.48	AAAA
ATOM	1068	CG2	VAL	A	135	24.164	39.384	14.508	1.00	46.88	AAAA
ATOM	1069	C	VAL	A	135	26.581	41.732	12.745	1.00	44.55	AAAA
ATOM	1070	O	VAL	A	135	26.204	42.847	13.081	1.00	44.11	AAAA
ATOM	1071	N	GLU	A	136	27.772	41.496	12.225	1.00	43.51	AAAA
ATOM	1072	CA	GLU	A	136	28.733	42.557	11.996	1.00	43.67	AAAA
ATOM	1073	CB	GLU	A	136	30.140	41.963	11.975	1.00	45.50	AAAA
ATOM	1074	CG	GLU	A	136	30.186	40.546	11.410	1.00	47.80	AAAA
ATOM	1075	CD	GLU	A	136	29.509	40.422	10.049	1.00	49.63	AAAA
ATOM	1076	OE1	GLU	A	136	30.186	40.632	9.018	1.00	48.59	AAAA
ATOM	1077	OE2	GLU	A	136	28.292	40.125	10.014	1.00	50.58	AAAA
ATOM	1078	C	GLU	A	136	28.410	43.191	10.639	1.00	42.78	AAAA
ATOM	1079	O	GLU	A	136	29.254	43.247	9.754	1.00	44.13	AAAA
ATOM	1080	N	SER	A	137	27.186	43.668	10.465	1.00	41.95	AAAA
ATOM	1081	CA	SER	A	137	26.812	44.260	9.191	1.00	41.46	AAAA
ATOM	1082	CB	SER	A	137	26.464	43.161	8.199	1.00	41.19	AAAA
ATOM	1083	OG	SER	A	137	25.206	42.596	8.522	1.00	40.22	AAAA
ATOM	1084	C	SER	A	137	25.611	45.178	9.341	1.00	41.40	AAAA
ATOM	1085	O	SER	A	137	25.389	46.076	8.528	1.00	40.95	AAAA
ATOM	1086	N	ILE	A	138	24.824	44.933	10.377	1.00	40.68	AAAA
ATOM	1087	CA	ILE	A	138	23.652	45.738	10.625	1.00	40.30	AAAA
ATOM	1088	CB	ILE	A	138	22.897	45.223	11.859	1.00	40.33	AAAA
ATOM	1089	CG2	ILE	A	138	21.850	46.234	12.314	1.00	41.04	AAAA
ATOM	1090	CG1	ILE	A	138	22.275	43.871	11.541	1.00	38.98	AAAA
ATOM	1091	CD1	ILE	A	138	23.291	42.781	11.428	1.00	39.86	AAAA
ATOM	1092	C	ILE	A	138	24.038	47.194	10.851	1.00	40.77	AAAA
ATOM	1093	O	ILE	A	138	24.973	47.486	11.597	1.00	39.73	AAAA
ATOM	1094	N	GLN	A	139	23.323	48.095	10.175	1.00	41.55	AAAA
ATOM	1095	CA	GLN	A	139	23.528	49.537	10.316	1.00	40.92	AAAA
ATOM	1096	CB	GLN	A	139	22.915	50.297	9.132	1.00	40.20	AAAA
ATOM	1097	CG	GLN	A	139	23.745	50.270	7.844	1.00	40.56	AAAA
ATOM	1098	CD	GLN	A	139	25.097	50.938	8.007	0.01	40.38	AAAA
ATOM	1099	OE1	GLN	A	139	25.182	52.124	8.326	0.01	40.37	AAAA
ATOM	1100	NE2	GLN	A	139	26.163	50.177	7.787	0.01	40.37	AAAA
ATOM	1101	C	GLN	A	139	22.784	49.889	11.596	1.00	40.86	AAAA
ATOM	1102	O	GLN	A	139	21.560	49.933	11.610	1.00	40.96	AAAA
ATOM	1103	N	TRP	A	140	23.523	50.118	12.674	1.00	40.75	AAAA
ATOM	1104	CA	TRP	A	140	22.897	50.418	13.950	1.00	40.84	AAAA
ATOM	1105	CB	TRP	A	140	23.870	50.111	15.103	1.00	40.81	AAAA
ATOM	1106	CG	TRP	A	140	24.227	48.624	15.257	1.00	40.56	AAAA
ATOM	1107	CD2	TRP	A	140	23.429	47.610	15.874	1.00	39.33	AAAA
ATOM	1108	CE2	TRP	A	140	24.122	46.389	15.742	1.00	37.02	AAAA
ATOM	1109	CE3	TRP	A	140	22.192	47.616	16.526	1.00	40.37	AAAA
ATOM	1110	CD1	TRP	A	140	25.345	47.988	14.792	1.00	40.67	AAAA
ATOM	1111	NE1	TRP	A	140	25.288	46.646	15.079	1.00	37.63	AAAA
ATOM	1112	CZ2	TRP	A	140	23.624	45.193	16.230	1.00	38.31	AAAA
ATOM	1113	CZ3	TRP	A	140	21.695	46.420	17.015	1.00	41.10	AAAA
ATOM	1114	CH2	TRP	A	140	22.411	45.225	16.864	1.00	40.34	AAAA
ATOM	1115	C	TRP	A	140	22.357	51.847	14.064	1.00	41.96	AAAA
ATOM	1116	O	TRP	A	140	21.629	52.155	15.008	1.00	41.98	AAAA
ATOM	1117	N	ARG	A	141	22.692	52.711	13.106	1.00	42.56	AAAA
ATOM	1118	CA	ARG	A	141	22.204	54.089	13.127	1.00	42.46	AAAA
ATOM	1119	CB	ARG	A	141	22.920	54.937	12.086	1.00	44.33	AAAA
ATOM	1120	CG	ARG	A	141	24.409	55.095	12.283	1.00	48.25	AAAA

ATOM	1121	CD	ARG	A	141	25.003	55.897	11.126	1.00	52.40	AAAA
ATOM	1122	NE	ARG	A	141	24.427	55.476	9.844	1.00	55.80	AAAA
ATOM	1123	CZ	ARG	A	141	24.974	55.704	8.652	1.00	56.52	AAAA
ATOM	1124	NH1	ARG	A	141	26.128	56.356	8.560	1.00	57.80	AAAA
ATOM	1125	NH2	ARG	A	141	24.368	55.276	7.549	1.00	56.43	AAAA
ATOM	1126	C	ARG	A	141	20.712	54.126	12.827	1.00	42.37	AAAA
ATOM	1127	O	ARG	A	141	20.029	55.098	13.142	1.00	41.87	AAAA
ATOM	1128	N	ASP	A	142	20.212	53.062	12.209	1.00	42.16	AAAA
ATOM	1129	CA	ASP	A	142	18.805	52.964	11.854	1.00	42.72	AAAA
ATOM	1130	CB	ASP	A	142	18.640	52.058	10.626	1.00	43.43	AAAA
ATOM	1131	CG	ASP	A	142	17.208	52.022	10.094	1.00	44.06	AAAA
ATOM	1132	OD1	ASP	A	142	16.926	52.697	9.080	1.00	43.03	AAAA
ATOM	1133	OD2	ASP	A	142	16.366	51.314	10.687	1.00	44.12	AAAA
ATOM	1134	C	ASP	A	142	17.997	52.412	13.025	1.00	43.71	AAAA
ATOM	1135	O	ASP	A	142	16.768	52.440	13.003	1.00	43.64	AAAA
ATOM	1136	N	ILE	A	143	18.681	51.907	14.048	1.00	44.70	AAAA
ATOM	1137	CA	ILE	A	143	17.977	51.362	15.205	1.00	46.13	AAAA
ATOM	1138	CB	ILE	A	143	18.335	49.866	15.458	1.00	46.01	AAAA
ATOM	1139	CG2	ILE	A	143	17.669	49.386	16.749	1.00	45.83	AAAA
ATOM	1140	CG1	ILE	A	143	17.831	49.001	14.298	1.00	45.74	AAAA
ATOM	1141	CD1	ILE	A	143	18.088	47.508	14.463	1.00	44.80	AAAA
ATOM	1142	C	ILE	A	143	18.165	52.140	16.512	1.00	46.77	AAAA
ATOM	1143	O	ILE	A	143	17.177	52.521	17.138	1.00	46.85	AAAA
ATOM	1144	N	VAL	A	144	19.408	52.381	16.928	1.00	47.51	AAAA
ATOM	1145	CA	VAL	A	144	19.641	53.105	18.181	1.00	49.06	AAAA
ATOM	1146	CB	VAL	A	144	20.991	52.711	18.826	1.00	47.81	AAAA
ATOM	1147	CG1	VAL	A	144	21.082	51.217	18.941	1.00	48.72	AAAA
ATOM	1148	CG2	VAL	A	144	22.137	53.230	18.017	1.00	48.22	AAAA
ATOM	1149	C	VAL	A	144	19.581	54.624	18.026	1.00	50.45	AAAA
ATOM	1150	O	VAL	A	144	20.184	55.195	17.115	1.00	50.50	AAAA
ATOM	1151	N	SER	A	145	18.844	55.272	18.924	1.00	51.55	AAAA
ATOM	1152	CA	SER	A	145	18.691	56.718	18.881	1.00	53.05	AAAA
ATOM	1153	CB	SER	A	145	17.690	57.180	19.931	1.00	53.22	AAAA
ATOM	1154	OG	SER	A	145	16.374	56.850	19.529	1.00	56.10	AAAA
ATOM	1155	C	SER	A	145	19.990	57.478	19.054	1.00	54.16	AAAA
ATOM	1156	O	SER	A	145	20.860	57.095	19.836	1.00	54.29	AAAA
ATOM	1157	N	SER	A	146	20.095	58.567	18.305	1.00	55.41	AAAA
ATOM	1158	CA	SER	A	146	21.262	59.432	18.303	1.00	56.46	AAAA
ATOM	1159	CB	SER	A	146	20.831	60.817	17.853	1.00	56.53	AAAA
ATOM	1160	OG	SER	A	146	19.602	61.157	18.467	1.00	57.63	AAAA
ATOM	1161	C	SER	A	146	21.994	59.531	19.633	1.00	57.73	AAAA
ATOM	1162	O	SER	A	146	23.199	59.284	19.711	1.00	57.49	AAAA
ATOM	1163	N	ASP	A	147	21.245	59.882	20.673	1.00	58.99	AAAA
ATOM	1164	CA	ASP	A	147	21.764	60.075	22.023	1.00	60.48	AAAA
ATOM	1165	CB	ASP	A	147	20.589	60.183	22.993	1.00	63.24	AAAA
ATOM	1166	CG	ASP	A	147	19.334	60.703	22.320	1.00	66.22	AAAA
ATOM	1167	OD1	ASP	A	147	19.454	61.612	21.474	1.00	67.52	AAAA
ATOM	1168	OD2	ASP	A	147	18.228	60.210	22.636	1.00	67.59	AAAA
ATOM	1169	C	ASP	A	147	22.781	59.078	22.582	1.00	60.49	AAAA
ATOM	1170	O	ASP	A	147	23.960	59.405	22.745	1.00	59.76	AAAA
ATOM	1171	N	PHE	A	148	22.324	57.868	22.890	1.00	60.96	AAAA
ATOM	1172	CA	PHE	A	148	23.192	56.850	23.479	1.00	60.60	AAAA
ATOM	1173	CB	PHE	A	148	22.342	55.773	24.152	1.00	60.67	AAAA
ATOM	1174	CG	PHE	A	148	21.029	56.281	24.667	1.00	61.46	AAAA
ATOM	1175	CD1	PHE	A	148	19.908	56.297	23.844	1.00	61.50	AAAA
ATOM	1176	CD2	PHE	A	148	20.922	56.789	25.959	1.00	62.22	AAAA
ATOM	1177	CE1	PHE	A	148	18.697	56.812	24.293	1.00	62.32	AAAA
ATOM	1178	CE2	PHE	A	148	19.711	57.310	26.423	1.00	62.67	AAAA
ATOM	1179	CZ	PHE	A	148	18.595	57.322	25.585	1.00	62.70	AAAA
ATOM	1180	C	PHE	A	148	24.133	56.212	22.476	1.00	59.99	AAAA
ATOM	1181	O	PHE	A	148	24.928	55.343	22.824	1.00	60.39	AAAA
ATOM	1182	N	LEU	A	149	24.042	56.670	21.235	1.00	59.44	AAAA
ATOM	1183	CA	LEU	A	149	24.863	56.174	20.137	1.00	58.87	AAAA
ATOM	1184	CB	LEU	A	149	24.728	57.130	18.959	1.00	58.30	AAAA
ATOM	1185	CG	LEU	A	149	25.271	56.642	17.629	1.00	58.25	AAAA
ATOM	1186	CD1	LEU	A	149	24.541	55.383	17.212	1.00	57.15	AAAA
ATOM	1187	CD2	LEU	A	149	25.096	57.741	16.601	1.00	59.29	AAAA
ATOM	1188	C	LEU	A	149	26.351	55.974	20.460	1.00	58.49	AAAA
ATOM	1189	O	LEU	A	149	26.888	54.877	20.297	1.00	58.46	AAAA
ATOM	1190	N	SER	A	150	27.009	57.037	20.914	1.00	57.81	AAAA
ATOM	1191	CA	SER	A	150	28.435	56.999	21.237	1.00	56.86	AAAA
ATOM	1192	CB	SER	A	150	28.952	58.421	21.452	1.00	56.42	AAAA
ATOM	1193	OG	SER	A	150	28.269	59.027	22.533	1.00	55.16	AAAA
ATOM	1194	C	SER	A	150	28.799	56.158	22.451	1.00	56.77	AAAA
ATOM	1195	O	SER	A	150	29.981	56.017	22.772	1.00	56.40	AAAA

ATOM	1196	N	ASN	A	151	27.794	55.616	23.134	1.00	56.59	AAAA
ATOM	1197	CA	ASN	A	151	28.032	54.793	24.317	1.00	56.28	AAAA
ATOM	1198	CB	ASN	A	151	26.924	55.009	25.357	1.00	59.47	AAAA
ATOM	1199	CG	ASN	A	151	27.145	56.251	26.196	1.00	62.41	AAAA
ATOM	1200	OD1	ASN	A	151	26.576	57.311	25.936	1.00	63.05	AAAA
ATOM	1201	ND2	ASN	A	151	28.004	56.124	27.199	1.00	66.19	AAAA
ATOM	1202	C	ASN	A	151	28.141	53.309	23.989	1.00	54.29	AAAA
ATOM	1203	O	ASN	A	151	28.465	52.497	24.849	1.00	54.19	AAAA
ATOM	1204	N	MET	A	152	27.886	52.968	22.734	1.00	51.92	AAAA
ATOM	1205	CA	MET	A	152	27.958	51.592	22.280	1.00	50.27	AAAA
ATOM	1206	CB	MET	A	152	27.516	51.511	20.826	1.00	50.89	AAAA
ATOM	1207	CG	MET	A	152	26.132	52.052	20.579	1.00	51.62	AAAA
ATOM	1208	SD	MET	A	152	25.432	51.283	19.128	1.00	52.87	AAAA
ATOM	1209	CE	MET	A	152	26.719	51.638	17.928	1.00	52.21	AAAA
ATOM	1210	C	MET	A	152	29.332	50.944	22.411	1.00	49.22	AAAA
ATOM	1211	O	MET	A	152	30.358	51.624	22.422	1.00	48.41	AAAA
ATOM	1212	N	SER	A	153	29.336	49.616	22.514	1.00	48.12	AAAA
ATOM	1213	CA	SER	A	153	30.571	48.845	22.620	1.00	47.30	AAAA
ATOM	1214	CB	SER	A	153	30.816	48.379	24.050	1.00	46.46	AAAA
ATOM	1215	OG	SER	A	153	32.019	47.628	24.116	1.00	45.87	AAAA
ATOM	1216	C	SER	A	153	30.509	47.626	21.706	1.00	47.08	AAAA
ATOM	1217	O	SER	A	153	30.287	46.498	22.160	1.00	46.38	AAAA
ATOM	1218	N	MET	A	154	30.714	47.872	20.415	1.00	45.75	AAAA
ATOM	1219	CA	MET	A	154	30.682	46.827	19.412	1.00	44.43	AAAA
ATOM	1220	CB	MET	A	154	30.173	47.397	18.099	1.00	41.33	AAAA
ATOM	1221	CG	MET	A	154	28.953	48.249	18.272	1.00	39.32	AAAA
ATOM	1222	SD	MET	A	154	27.643	47.328	19.030	1.00	37.81	AAAA
ATOM	1223	CE	MET	A	154	26.360	47.588	17.876	1.00	37.18	AAAA
ATOM	1224	C	MET	A	154	32.070	46.240	19.202	1.00	45.59	AAAA
ATOM	1225	O	MET	A	154	33.078	46.948	19.244	1.00	46.60	AAAA
ATOM	1226	N	ASP	A	155	32.113	44.934	18.990	1.00	45.52	AAAA
ATOM	1227	CA	ASP	A	155	33.358	44.233	18.749	1.00	45.29	AAAA
ATOM	1228	CB	ASP	A	155	34.195	44.112	20.008	1.00	44.77	AAAA
ATOM	1229	CG	ASP	A	155	35.120	42.913	19.957	1.00	43.99	AAAA
ATOM	1230	OD1	ASP	A	155	35.864	42.782	18.963	1.00	43.72	AAAA
ATOM	1231	OD2	ASP	A	155	35.099	42.093	20.896	1.00	44.07	AAAA
ATOM	1232	C	ASP	A	155	33.040	42.844	18.274	1.00	46.03	AAAA
ATOM	1233	O	ASP	A	155	32.350	42.096	18.959	1.00	47.07	AAAA
ATOM	1234	N	PHE	A	156	33.560	42.494	17.107	1.00	45.97	AAAA
ATOM	1235	CA	PHE	A	156	33.315	41.183	16.557	1.00	45.74	AAAA
ATOM	1236	CB	PHE	A	156	32.333	41.277	15.394	1.00	46.17	AAAA
ATOM	1237	CG	PHE	A	156	31.140	42.129	15.670	1.00	44.77	AAAA
ATOM	1238	CD1	PHE	A	156	31.272	43.498	15.828	1.00	45.24	AAAA
ATOM	1239	CD2	PHE	A	156	29.877	41.568	15.728	1.00	46.14	AAAA
ATOM	1240	CE1	PHE	A	156	30.161	44.300	16.033	1.00	46.85	AAAA
ATOM	1241	CE2	PHE	A	156	28.754	42.359	15.933	1.00	48.39	AAAA
ATOM	1242	CZ	PHE	A	156	28.896	43.732	16.086	1.00	47.98	AAAA
ATOM	1243	C	PHE	A	156	34.595	40.521	16.076	1.00	45.75	AAAA
ATOM	1244	O	PHE	A	156	35.617	41.167	15.863	1.00	46.18	AAAA
ATOM	1245	N	GLN	A	157	34.504	39.212	15.905	1.00	45.98	AAAA
ATOM	1246	CA	GLN	A	157	35.589	38.365	15.448	1.00	46.60	AAAA
ATOM	1247	CB	GLN	A	157	36.664	38.210	16.540	1.00	46.14	AAAA
ATOM	1248	CG	GLN	A	157	37.301	39.503	17.056	1.00	44.23	AAAA
ATOM	1249	CD	GLN	A	157	38.316	39.257	18.156	0.01	44.64	AAAA
ATOM	1250	OE1	GLN	A	157	39.315	38.567	17.954	0.01	44.46	AAAA
ATOM	1251	NE2	GLN	A	157	38.064	39.825	19.331	0.01	44.46	AAAA
ATOM	1252	C	GLN	A	157	34.849	37.045	15.274	1.00	47.54	AAAA
ATOM	1253	O	GLN	A	157	33.899	36.783	15.998	1.00	47.69	AAAA
ATOM	1254	N	ASN	A	158	35.241	36.224	14.314	1.00	49.06	AAAA
ATOM	1255	CA	ASN	A	158	34.563	34.948	14.143	1.00	51.89	AAAA
ATOM	1256	CB	ASN	A	158	33.361	35.072	13.206	1.00	51.40	AAAA
ATOM	1257	CG	ASN	A	158	32.700	33.738	12.924	0.01	51.55	AAAA
ATOM	1258	OD1	ASN	A	158	32.238	33.057	13.838	0.01	51.56	AAAA
ATOM	1259	ND2	ASN	A	158	32.653	33.356	11.653	0.01	51.57	AAAA
ATOM	1260	C	ASN	A	158	35.551	33.960	13.586	1.00	54.14	AAAA
ATOM	1261	O	ASN	A	158	36.409	34.325	12.786	1.00	54.42	AAAA
ATOM	1262	N	HIS	A	159	35.435	32.712	14.030	1.00	56.53	AAAA
ATOM	1263	CA	HIS	A	159	36.322	31.645	13.591	1.00	58.49	AAAA
ATOM	1264	CB	HIS	A	159	37.509	31.530	14.550	1.00	58.07	AAAA
ATOM	1265	CG	HIS	A	159	38.440	32.699	14.481	0.01	58.80	AAAA
ATOM	1266	CD2	HIS	A	159	38.758	33.646	15.395	0.01	58.87	AAAA
ATOM	1267	ND1	HIS	A	159	39.132	33.026	13.334	0.01	58.83	AAAA
ATOM	1268	CE1	HIS	A	159	39.833	34.125	13.543	1.00	58.99	AAAA
ATOM	1269	NE2	HIS	A	159	39.623	34.523	14.786	1.00	59.59	AAAA
ATOM	1270	C	HIS	A	159	35.578	30.322	13.488	1.00	59.77	AAAA

ATOM	1271	O	HIS	A	159	36.078	29.281	13.911	1.00	60.67	AAAA
ATOM	1272	N	LEU	A	160	34.372	30.379	12.925	1.00	60.50	AAAA
ATOM	1273	CA	LEU	A	160	33.538	29.195	12.728	1.00	60.49	AAAA
ATOM	1274	CB	LEU	A	160	32.094	29.489	13.146	1.00	60.18	AAAA
ATOM	1275	CG	LEU	A	160	31.123	28.305	13.129	0.01	60.16	AAAA
ATOM	1276	CD1	LEU	A	160	31.613	27.230	14.087	0.01	60.07	AAAA
ATOM	1277	CD2	LEU	A	160	29.731	28.773	13.523	0.01	60.07	AAAA
ATOM	1278	C	LEU	A	160	33.586	28.816	11.242	1.00	60.97	AAAA
ATOM	1279	O	LEU	A	160	33.198	27.707	10.848	1.00	60.92	AAAA
ATOM	1280	N	GLY	A	161	34.073	29.752	10.427	1.00	60.46	AAAA
ATOM	1281	CA	GLY	A	161	34.178	29.524	8.998	1.00	58.69	AAAA
ATOM	1282	C	GLY	A	161	32.899	28.950	8.438	1.00	57.50	AAAA
ATOM	1283	O	GLY	A	161	32.927	27.988	7.670	1.00	57.96	AAAA
ATOM	1284	N	SER	A	162	31.775	29.544	8.826	1.00	55.82	AAAA
ATOM	1285	CA	SER	A	162	30.474	29.078	8.368	1.00	53.90	AAAA
ATOM	1286	CB	SER	A	162	29.815	28.194	9.420	1.00	54.80	AAAA
ATOM	1287	OG	SER	A	162	28.951	28.969	10.243	1.00	55.74	AAAA
ATOM	1288	C	SER	A	162	29.541	30.235	8.102	1.00	52.16	AAAA
ATOM	1289	O	SER	A	162	28.325	30.046	8.076	1.00	52.13	AAAA
ATOM	1290	N	CYS	A	163	30.089	31.431	7.918	1.00	50.11	AAAA
ATOM	1291	CA	CYS	A	163	29.240	32.587	7.669	1.00	47.89	AAAA
ATOM	1292	C	CYS	A	163	29.163	32.969	6.200	1.00	47.30	AAAA
ATOM	1293	O	CYS	A	163	30.170	33.274	5.560	1.00	46.66	AAAA
ATOM	1294	CB	CYS	A	163	29.712	33.792	8.482	1.00	47.12	AAAA
ATOM	1295	SG	CYS	A	163	29.757	33.564	10.288	1.00	46.86	AAAA
ATOM	1296	N	GLN	A	164	27.953	32.949	5.662	1.00	47.06	AAAA
ATOM	1297	CA	GLN	A	164	27.769	33.319	4.275	1.00	47.49	AAAA
ATOM	1298	CB	GLN	A	164	26.734	32.412	3.613	1.00	47.34	AAAA
ATOM	1299	CG	GLN	A	164	25.564	32.071	4.487	1.00	47.15	AAAA
ATOM	1300	CD	GLN	A	164	24.694	30.995	3.870	1.00	47.25	AAAA
ATOM	1301	OE1	GLN	A	164	23.911	31.258	2.958	1.00	46.92	AAAA
ATOM	1302	NE2	GLN	A	164	24.839	29.768	4.360	1.00	48.15	AAAA
ATOM	1303	C	GLN	A	164	27.365	34.781	4.145	1.00	46.66	AAAA
ATOM	1304	O	GLN	A	164	27.193	35.489	5.141	1.00	46.28	AAAA
ATOM	1305	N	LYS	A	165	27.241	35.232	2.905	1.00	45.43	AAAA
ATOM	1306	CA	LYS	A	165	26.879	36.607	2.639	1.00	43.87	AAAA
ATOM	1307	CB	LYS	A	165	27.515	37.062	1.321	1.00	44.86	AAAA
ATOM	1308	CG	LYS	A	165	29.035	37.023	1.324	0.01	44.06	AAAA
ATOM	1309	CD	LYS	A	165	29.604	37.507	0.001	0.01	43.80	AAAA
ATOM	1310	CE	LYS	A	165	31.124	37.473	0.010	0.01	43.59	AAAA
ATOM	1311	NZ	LYS	A	165	31.699	37.949	-1.279	0.01	43.16	AAAA
ATOM	1312	C	LYS	A	165	25.366	36.697	2.571	1.00	42.44	AAAA
ATOM	1313	O	LYS	A	165	24.676	35.673	2.531	1.00	42.23	AAAA
ATOM	1314	N	CYS	A	166	24.860	37.924	2.576	1.00	39.44	AAAA
ATOM	1315	CA	CYS	A	166	23.430	38.184	2.518	1.00	37.27	AAAA
ATOM	1316	C	CYS	A	166	23.022	38.173	1.024	1.00	35.93	AAAA
ATOM	1317	O	CYS	A	166	23.862	38.485	0.177	1.00	34.55	AAAA
ATOM	1318	CB	CYS	A	166	23.154	39.572	3.118	1.00	39.87	AAAA
ATOM	1319	SG	CYS	A	166	23.882	40.161	4.722	1.00	40.82	AAAA
ATOM	1320	N	ASP	A	167	21.771	37.819	0.682	1.00	34.48	AAAA
ATOM	1321	CA	ASP	A	167	21.343	37.818	-0.745	1.00	32.19	AAAA
ATOM	1322	CB	ASP	A	167	19.804	37.557	-0.914	1.00	25.26	AAAA
ATOM	1323	CG	ASP	A	167	19.413	36.918	-2.310	1.00	20.74	AAAA
ATOM	1324	OD1	ASP	A	167	20.293	36.387	-3.006	1.00	21.79	AAAA
ATOM	1325	OD2	ASP	A	167	18.228	36.917	-2.720	1.00	6.51	AAAA
ATOM	1326	C	ASP	A	167	21.720	39.246	-1.134	1.00	34.55	AAAA
ATOM	1327	O	ASP	A	167	21.606	40.167	-0.325	1.00	35.83	AAAA
ATOM	1328	N	PRO	A	168	22.220	39.453	-2.352	1.00	36.39	AAAA
ATOM	1329	CD	PRO	A	168	22.853	38.547	-3.328	1.00	36.09	AAAA
ATOM	1330	CA	PRO	A	168	22.561	40.849	-2.627	1.00	37.72	AAAA
ATOM	1331	CB	PRO	A	168	23.257	40.765	-3.980	1.00	37.75	AAAA
ATOM	1332	CG	PRO	A	168	23.960	39.420	-3.882	1.00	37.21	AAAA
ATOM	1333	C	PRO	A	168	21.406	41.850	-2.591	1.00	38.88	AAAA
ATOM	1334	O	PRO	A	168	21.628	43.056	-2.691	1.00	40.08	AAAA
ATOM	1335	N	SER	A	169	20.178	41.370	-2.428	1.00	39.94	AAAA
ATOM	1336	CA	SER	A	169	19.043	42.284	-2.362	1.00	42.06	AAAA
ATOM	1337	CB	SER	A	169	17.734	41.526	-2.543	1.00	43.24	AAAA
ATOM	1338	OG	SER	A	169	17.632	41.020	-3.860	1.00	46.36	AAAA
ATOM	1339	C	SER	A	169	19.030	43.022	-1.026	1.00	42.25	AAAA
ATOM	1340	O	SER	A	169	18.089	43.759	-0.711	1.00	43.64	AAAA
ATOM	1341	N	CYS	A	170	20.090	42.824	-0.248	1.00	42.01	AAAA
ATOM	1342	CA	CYS	A	170	20.232	43.445	1.060	1.00	40.28	AAAA
ATOM	1343	C	CYS	A	170	21.013	44.763	0.998	1.00	40.98	AAAA
ATOM	1344	O	CYS	A	170	22.035	44.839	0.314	1.00	40.66	AAAA
ATOM	1345	CB	CYS	A	170	20.967	42.494	1.984	1.00	37.79	AAAA

ATOM	1346	SG	CYS	A	170	20.099	40.980	2.481	1.00	37.44	AAAA
ATOM	1347	N	PRO	A	171	20.541	45.812	1.714	1.00	41.58	AAAA
ATOM	1348	CD	PRO	A	171	19.235	45.791	2.395	1.00	41.74	AAAA
ATOM	1349	CA	PRO	A	171	21.144	47.160	1.796	1.00	41.58	AAAA
ATOM	1350	CB	PRO	A	171	20.231	47.889	2.770	1.00	40.94	AAAA
ATOM	1351	CG	PRO	A	171	18.901	47.265	2.485	1.00	42.75	AAAA
ATOM	1352	C	PRO	A	171	22.576	47.094	2.306	1.00	41.09	AAAA
ATOM	1353	O	PRO	A	171	22.832	46.526	3.355	1.00	40.69	AAAA
ATOM	1354	N	ASN	A	172	23.501	47.687	1.565	1.00	42.04	AAAA
ATOM	1355	CA	ASN	A	172	24.924	47.645	1.903	1.00	43.69	AAAA
ATOM	1356	CB	ASN	A	172	25.296	48.738	2.901	1.00	42.72	AAAA
ATOM	1357	CG	ASN	A	172	26.797	48.943	3.001	1.00	42.16	AAAA
ATOM	1358	OD1	ASN	A	172	27.270	49.764	3.786	0.01	42.06	AAAA
ATOM	1359	ND2	ASN	A	172	27.553	48.197	2.203	0.01	42.04	AAAA
ATOM	1360	C	ASN	A	172	25.273	46.274	2.483	1.00	45.50	AAAA
ATOM	1361	O	ASN	A	172	26.265	46.112	3.201	1.00	45.46	AAAA
ATOM	1362	N	GLY	A	173	24.447	45.286	2.147	1.00	46.36	AAAA
ATOM	1363	CA	GLY	A	173	24.659	43.940	2.634	1.00	47.36	AAAA
ATOM	1364	C	GLY	A	173	24.566	43.928	4.139	1.00	47.78	AAAA
ATOM	1365	O	GLY	A	173	25.573	43.678	4.804	1.00	48.35	AAAA
ATOM	1366	N	SER	A	174	23.366	44.204	4.663	1.00	47.21	AAAA
ATOM	1367	CA	SER	A	174	23.119	44.238	6.107	1.00	45.98	AAAA
ATOM	1368	CB	SER	A	174	22.092	45.322	6.433	1.00	46.67	AAAA
ATOM	1369	OG	SER	A	174	22.683	46.612	6.375	1.00	46.52	AAAA
ATOM	1370	C	SER	A	174	22.656	42.890	6.662	1.00	44.43	AAAA
ATOM	1371	O	SER	A	174	23.454	42.131	7.212	1.00	44.32	AAAA
ATOM	1372	N	CYS	A	175	21.366	42.607	6.544	1.00	41.87	AAAA
ATOM	1373	CA	CYS	A	175	20.816	41.328	6.992	1.00	39.77	AAAA
ATOM	1374	C	CYS	A	175	21.271	40.722	8.315	1.00	38.41	AAAA
ATOM	1375	O	CYS	A	175	22.445	40.757	8.657	1.00	36.77	AAAA
ATOM	1376	CB	CYS	A	175	21.078	40.289	5.933	1.00	39.04	AAAA
ATOM	1377	SG	CYS	A	175	22.634	39.352	6.113	1.00	38.65	AAAA
ATOM	1378	N	TRP	A	176	20.327	40.113	9.029	1.00	38.82	AAAA
ATOM	1379	CA	TRP	A	176	20.625	39.460	10.302	1.00	39.58	AAAA
ATOM	1380	CB	TRP	A	176	19.441	39.554	11.274	1.00	39.87	AAAA
ATOM	1381	CG	TRP	A	176	19.087	40.933	11.666	1.00	40.60	AAAA
ATOM	1382	CD2	TRP	A	176	19.601	41.663	12.785	1.00	42.09	AAAA
ATOM	1383	CE2	TRP	A	176	19.041	42.951	12.732	1.00	42.67	AAAA
ATOM	1384	CE3	TRP	A	176	20.484	41.353	13.827	1.00	42.84	AAAA
ATOM	1385	CD1	TRP	A	176	18.259	41.777	11.005	1.00	40.45	AAAA
ATOM	1386	NE1	TRP	A	176	18.224	42.993	11.633	1.00	42.18	AAAA
ATOM	1387	CZ2	TRP	A	176	19.336	43.939	13.684	1.00	43.58	AAAA
ATOM	1388	CZ3	TRP	A	176	20.780	42.335	14.773	1.00	42.51	AAAA
ATOM	1389	CH2	TRP	A	176	20.207	43.611	14.693	1.00	42.94	AAAA
ATOM	1390	C	TRP	A	176	20.969	37.984	10.092	1.00	39.42	AAAA
ATOM	1391	O	TRP	A	176	20.887	37.184	11.022	1.00	39.86	AAAA
ATOM	1392	N	GLY	A	177	21.353	37.630	8.871	1.00	38.90	AAAA
ATOM	1393	CA	GLY	A	177	21.711	36.254	8.582	1.00	39.23	AAAA
ATOM	1394	C	GLY	A	177	21.485	35.868	7.133	1.00	39.70	AAAA
ATOM	1395	O	GLY	A	177	20.940	36.644	6.354	1.00	40.29	AAAA
ATOM	1396	N	ALA	A	178	21.904	34.664	6.764	1.00	39.19	AAAA
ATOM	1397	CA	ALA	A	178	21.725	34.201	5.399	1.00	38.43	AAAA
ATOM	1398	CB	ALA	A	178	22.358	32.843	5.227	1.00	37.85	AAAA
ATOM	1399	C	ALA	A	178	20.234	34.134	5.087	1.00	38.27	AAAA
ATOM	1400	O	ALA	A	178	19.457	33.578	5.854	1.00	37.03	AAAA
ATOM	1401	N	GLY	A	179	19.838	34.712	3.960	1.00	38.70	AAAA
ATOM	1402	CA	GLY	A	179	18.438	34.703	3.584	1.00	39.11	AAAA
ATOM	1403	C	GLY	A	179	18.004	36.028	2.993	1.00	39.66	AAAA
ATOM	1404	O	GLY	A	179	18.578	37.078	3.291	1.00	39.25	AAAA
ATOM	1405	N	GLU	A	180	16.996	35.978	2.133	1.00	39.94	AAAA
ATOM	1406	CA	GLU	A	180	16.477	37.185	1.502	1.00	40.80	AAAA
ATOM	1407	CB	GLU	A	180	16.118	36.919	0.036	1.00	40.53	AAAA
ATOM	1408	CG	GLU	A	180	15.070	35.833	-0.163	0.01	40.69	AAAA
ATOM	1409	CD	GLU	A	180	15.563	34.459	0.248	0.01	40.66	AAAA
ATOM	1410	OE1	GLU	A	180	16.558	33.983	-0.337	0.01	40.61	AAAA
ATOM	1411	OE2	GLU	A	180	14.955	33.856	1.157	0.01	40.62	AAAA
ATOM	1412	C	GLU	A	180	15.238	37.606	2.286	1.00	40.95	AAAA
ATOM	1413	O	GLU	A	180	14.369	38.339	1.786	1.00	40.56	AAAA
ATOM	1414	N	GLU	A	181	15.172	37.105	3.519	1.00	39.88	AAAA
ATOM	1415	CA	GLU	A	181	14.084	37.402	4.438	1.00	37.97	AAAA
ATOM	1416	CB	GLU	A	181	13.366	36.120	4.862	1.00	38.57	AAAA
ATOM	1417	CG	GLU	A	181	12.216	36.333	5.836	0.01	38.20	AAAA
ATOM	1418	CD	GLU	A	181	11.146	37.257	5.287	0.01	38.16	AAAA
ATOM	1419	OE1	GLU	A	181	10.560	36.933	4.233	0.01	37.87	AAAA
ATOM	1420	OE2	GLU	A	181	10.891	38.308	5.911	0.01	37.87	AAAA

ATOM	1421	C	GLU	A	181	14.730	38.039	5.640	1.00	36.76	AAAA
ATOM	1422	O	GLU	A	181	14.045	38.553	6.516	1.00	36.71	AAAA
ATOM	1423	N	ASN	A	182	16.062	38.005	5.659	1.00	36.46	AAAA
ATOM	1424	CA	ASN	A	182	16.846	38.566	6.756	1.00	36.59	AAAA
ATOM	1425	CB	ASN	A	182	18.029	37.675	7.084	1.00	35.91	AAAA
ATOM	1426	CG	ASN	A	182	17.613	36.417	7.759	1.00	37.28	AAAA
ATOM	1427	OD1	ASN	A	182	16.948	36.446	8.795	1.00	36.76	AAAA
ATOM	1428	ND2	ASN	A	182	17.992	35.288	7.178	1.00	37.83	AAAA
ATOM	1429	C	ASN	A	182	17.371	39.959	6.543	1.00	36.43	AAAA
ATOM	1430	O	ASN	A	182	17.737	40.624	7.501	1.00	37.13	AAAA
ATOM	1431	N	CYS	A	183	17.430	40.396	5.291	1.00	37.15	AAAA
ATOM	1432	CA	CYS	A	183	17.927	41.726	4.978	1.00	36.13	AAAA
ATOM	1433	C	CYS	A	183	17.440	42.727	6.030	1.00	35.84	AAAA
ATOM	1434	O	CYS	A	183	16.305	42.646	6.509	1.00	35.43	AAAA
ATOM	1435	CB	CYS	A	183	17.452	42.158	3.589	1.00	36.56	AAAA
ATOM	1436	SG	CYS	A	183	18.115	41.278	2.129	1.00	36.85	AAAA
ATOM	1437	N	GLN	A	184	18.311	43.658	6.399	1.00	34.98	AAAA
ATOM	1438	CA	GLN	A	184	17.976	44.662	7.396	1.00	34.78	AAAA
ATOM	1439	CB	GLN	A	184	19.253	45.309	7.938	1.00	32.09	AAAA
ATOM	1440	CG	GLN	A	184	19.046	46.679	8.571	1.00	29.36	AAAA
ATOM	1441	CD	GLN	A	184	20.276	47.187	9.293	1.00	29.83	AAAA
ATOM	1442	OE1	GLN	A	184	21.392	47.060	8.793	1.00	28.08	AAAA
ATOM	1443	NE2	GLN	A	184	20.076	47.780	10.473	1.00	25.32	AAAA
ATOM	1444	C	GLN	A	184	17.057	45.751	6.869	1.00	36.28	AAAA
ATOM	1445	O	GLN	A	184	17.535	46.732	6.314	1.00	38.36	AAAA
ATOM	1446	N	LYS	A	185	15.747	45.585	7.042	1.00	36.66	AAAA
ATOM	1447	CA	LYS	A	185	14.786	46.600	6.602	1.00	37.51	AAAA
ATOM	1448	CB	LYS	A	185	13.403	46.322	7.193	1.00	37.74	AAAA
ATOM	1449	CG	LYS	A	185	12.894	44.907	7.050	1.00	37.22	AAAA
ATOM	1450	CD	LYS	A	185	11.561	44.754	7.778	1.00	37.75	AAAA
ATOM	1451	CE	LYS	A	185	11.057	43.306	7.762	1.00	38.08	AAAA
ATOM	1452	NZ	LYS	A	185	11.994	42.307	8.363	1.00	35.25	AAAA
ATOM	1453	C	LYS	A	185	15.275	47.948	7.144	1.00	38.14	AAAA
ATOM	1454	O	LYS	A	185	16.045	47.979	8.099	1.00	38.83	AAAA
ATOM	1455	N	LEU	A	186	14.842	49.062	6.559	1.00	38.84	AAAA
ATOM	1456	CA	LEU	A	186	15.287	50.351	7.074	1.00	39.71	AAAA
ATOM	1457	CB	LEU	A	186	16.409	50.917	6.201	1.00	38.05	AAAA
ATOM	1458	CG	LEU	A	186	17.737	50.148	6.313	1.00	38.34	AAAA
ATOM	1459	CD1	LEU	A	186	18.777	50.742	5.386	1.00	37.13	AAAA
ATOM	1460	CD2	LEU	A	186	18.238	50.184	7.744	1.00	37.12	AAAA
ATOM	1461	C	LEU	A	186	14.169	51.372	7.253	1.00	41.45	AAAA
ATOM	1462	O	LEU	A	186	13.165	51.346	6.538	1.00	41.35	AAAA
ATOM	1463	N	THR	A	187	14.342	52.256	8.237	1.00	43.16	AAAA
ATOM	1464	CA	THR	A	187	13.350	53.287	8.539	1.00	44.60	AAAA
ATOM	1465	CB	THR	A	187	12.227	52.731	9.438	1.00	45.06	AAAA
ATOM	1466	OG1	THR	A	187	12.806	52.158	10.616	1.00	45.12	AAAA
ATOM	1467	CG2	THR	A	187	11.419	51.665	8.702	1.00	44.75	AAAA
ATOM	1468	C	THR	A	187	13.936	54.528	9.224	1.00	45.65	AAAA
ATOM	1469	O	THR	A	187	13.255	55.177	10.014	1.00	44.03	AAAA
ATOM	1470	N	LYS	A	188	15.186	54.867	8.914	1.00	47.97	AAAA
ATOM	1471	CA	LYS	A	188	15.807	56.040	9.521	1.00	50.73	AAAA
ATOM	1472	CB	LYS	A	188	16.298	55.687	10.919	1.00	50.11	AAAA
ATOM	1473	CG	LYS	A	188	16.494	56.872	11.833	1.00	50.52	AAAA
ATOM	1474	CD	LYS	A	188	16.824	56.383	13.226	1.00	51.46	AAAA
ATOM	1475	CE	LYS	A	188	16.889	57.514	14.221	1.00	52.25	AAAA
ATOM	1476	NZ	LYS	A	188	17.177	56.996	15.583	1.00	52.30	AAAA
ATOM	1477	C	LYS	A	188	16.949	56.664	8.709	1.00	52.68	AAAA
ATOM	1478	O	LYS	A	188	17.176	57.874	8.785	1.00	53.98	AAAA
ATOM	1479	N	ILE	A	189	17.666	55.852	7.939	1.00	53.29	AAAA
ATOM	1480	CA	ILE	A	189	18.765	56.364	7.119	1.00	54.99	AAAA
ATOM	1481	CB	ILE	A	189	19.967	55.392	7.137	1.00	55.83	AAAA
ATOM	1482	CG2	ILE	A	189	21.129	55.967	6.315	1.00	57.48	AAAA
ATOM	1483	CG1	ILE	A	189	20.405	55.140	8.580	1.00	56.12	AAAA
ATOM	1484	CD1	ILE	A	189	21.553	54.154	8.700	1.00	56.06	AAAA
ATOM	1485	C	ILE	A	189	18.293	56.531	5.671	1.00	55.28	AAAA
ATOM	1486	O	ILE	A	189	19.015	57.024	4.803	1.00	54.25	AAAA
ATOM	1487	N	ILE	A	190	17.060	56.112	5.430	1.00	55.95	AAAA
ATOM	1488	CA	ILE	A	190	16.457	56.165	4.110	1.00	56.08	AAAA
ATOM	1489	CB	ILE	A	190	16.266	54.733	3.582	1.00	56.14	AAAA
ATOM	1490	CG2	ILE	A	190	15.553	54.730	2.249	1.00	56.11	AAAA
ATOM	1491	CG1	ILE	A	190	17.636	54.071	3.452	1.00	57.53	AAAA
ATOM	1492	CD1	ILE	A	190	17.596	52.667	2.879	1.00	60.38	AAAA
ATOM	1493	C	ILE	A	190	15.114	56.880	4.208	1.00	57.08	AAAA
ATOM	1494	O	ILE	A	190	14.092	56.387	3.723	1.00	57.69	AAAA
ATOM	1495	N	CYS	A	191	15.116	58.045	4.850	1.00	56.18	AAAA

ATOM	1496	CA	CYS	A	191	13.889	58.808	5.004	1.00	54.94	AAAA
ATOM	1497	C	CYS	A	191	13.947	60.188	4.364	1.00	55.22	AAAA
ATOM	1498	O	CYS	A	191	14.988	60.858	4.355	1.00	54.81	AAAA
ATOM	1499	CB	CYS	A	191	13.523	58.959	6.482	1.00	54.47	AAAA
ATOM	1500	SG	CYS	A	191	12.977	57.453	7.347	1.00	52.93	AAAA
ATOM	1501	N	ALA	A	192	12.792	60.602	3.849	1.00	55.09	AAAA
ATOM	1502	CA	ALA	A	192	12.630	61.884	3.188	1.00	53.54	AAAA
ATOM	1503	CB	ALA	A	192	11.171	62.042	2.742	1.00	52.78	AAAA
ATOM	1504	C	ALA	A	192	13.061	63.071	4.055	1.00	52.81	AAAA
ATOM	1505	O	ALA	A	192	12.775	63.125	5.258	1.00	51.08	AAAA
ATOM	1506	N	GLN	A	193	13.745	64.017	3.411	1.00	52.86	AAAA
ATOM	1507	CA	GLN	A	193	14.253	65.234	4.044	1.00	52.86	AAAA
ATOM	1508	CB	GLN	A	193	14.454	66.328	2.996	1.00	51.92	AAAA
ATOM	1509	CG	GLN	A	193	15.554	66.049	1.993	0.01	51.40	AAAA
ATOM	1510	CD	GLN	A	193	15.694	67.161	0.975	0.01	50.90	AAAA
ATOM	1511	OE1	GLN	A	193	14.814	67.370	0.140	0.01	50.51	AAAA
ATOM	1512	NE2	GLN	A	193	16.801	67.890	1.046	1.00	50.22	AAAA
ATOM	1513	C	GLN	A	193	13.372	65.783	5.150	1.00	53.45	AAAA
ATOM	1514	O	GLN	A	193	13.837	66.005	6.261	1.00	52.91	AAAA
ATOM	1515	N	GLN	A	194	12.102	66.014	4.836	1.00	54.55	AAAA
ATOM	1516	CA	GLN	A	194	11.173	66.547	5.820	1.00	55.29	AAAA
ATOM	1517	CB	GLN	A	194	10.214	67.554	5.179	1.00	54.92	AAAA
ATOM	1518	CG	GLN	A	194	10.515	67.855	3.747	1.00	57.71	AAAA
ATOM	1519	CD	GLN	A	194	9.806	66.912	2.819	1.00	60.36	AAAA
ATOM	1520	OE1	GLN	A	194	9.390	65.823	3.224	1.00	61.15	AAAA
ATOM	1521	NE2	GLN	A	194	9.654	67.322	1.560	1.00	60.88	AAAA
ATOM	1522	C	GLN	A	194	10.370	65.466	6.521	1.00	55.43	AAAA
ATOM	1523	O	GLN	A	194	9.137	65.435	6.412	1.00	55.39	AAAA
ATOM	1524	N	CYS	A	195	11.072	64.593	7.249	1.00	54.67	AAAA
ATOM	1525	CA	CYS	A	195	10.421	63.516	7.990	1.00	54.03	AAAA
ATOM	1526	C	CYS	A	195	11.144	63.075	9.235	1.00	52.85	AAAA
ATOM	1527	O	CYS	A	195	12.146	62.378	9.152	1.00	53.28	AAAA
ATOM	1528	CB	CYS	A	195	10.227	62.301	7.095	1.00	54.71	AAAA
ATOM	1529	SG	CYS	A	195	8.977	62.612	5.825	1.00	56.28	AAAA
ATOM	1530	N	SER	A	196	10.641	63.482	10.394	1.00	52.12	AAAA
ATOM	1531	CA	SER	A	196	11.253	63.061	11.650	1.00	51.48	AAAA
ATOM	1532	CB	SER	A	196	11.471	64.243	12.591	1.00	52.17	AAAA
ATOM	1533	OG	SER	A	196	12.304	63.852	13.670	1.00	51.42	AAAA
ATOM	1534	C	SER	A	196	10.294	62.049	12.268	1.00	50.00	AAAA
ATOM	1535	O	SER	A	196	9.230	62.398	12.777	1.00	49.13	AAAA
ATOM	1536	N	GLY	A	197	10.702	60.792	12.190	1.00	48.26	AAAA
ATOM	1537	CA	GLY	A	197	9.919	59.676	12.663	1.00	47.03	AAAA
ATOM	1538	C	GLY	A	197	10.388	58.619	11.693	1.00	47.41	AAAA
ATOM	1539	O	GLY	A	197	11.383	58.836	11.003	1.00	48.23	AAAA
ATOM	1540	N	ARG	A	198	9.702	57.492	11.600	1.00	47.31	AAAA
ATOM	1541	CA	ARG	A	198	10.150	56.457	10.672	1.00	47.64	AAAA
ATOM	1542	CB	ARG	A	198	9.896	55.075	11.281	1.00	46.93	AAAA
ATOM	1543	CG	ARG	A	198	10.105	55.028	12.790	1.00	46.12	AAAA
ATOM	1544	CD	ARG	A	198	11.555	55.253	13.206	1.00	44.22	AAAA
ATOM	1545	NE	ARG	A	198	12.373	54.062	13.004	1.00	42.54	AAAA
ATOM	1546	CZ	ARG	A	198	13.625	53.938	13.427	1.00	41.82	AAAA
ATOM	1547	NH1	ARG	A	198	14.208	54.929	14.081	1.00	41.80	AAAA
ATOM	1548	NH2	ARG	A	198	14.300	52.828	13.181	1.00	41.33	AAAA
ATOM	1549	C	ARG	A	198	9.435	56.585	9.324	1.00	48.05	AAAA
ATOM	1550	O	ARG	A	198	8.327	57.111	9.251	1.00	47.77	AAAA
ATOM	1551	N	CYS	A	199	10.065	56.111	8.255	1.00	48.27	AAAA
ATOM	1552	CA	CYS	A	199	9.438	56.192	6.945	1.00	48.12	AAAA
ATOM	1553	C	CYS	A	199	9.055	54.844	6.359	1.00	47.22	AAAA
ATOM	1554	O	CYS	A	199	8.265	54.127	6.943	1.00	47.77	AAAA
ATOM	1555	CB	CYS	A	199	10.338	56.944	5.980	1.00	49.86	AAAA
ATOM	1556	SG	CYS	A	199	12.046	56.350	5.934	1.00	49.71	AAAA
ATOM	1557	N	ARG	A	200	9.601	54.499	5.203	1.00	46.19	AAAA
ATOM	1558	CA	ARG	A	200	9.262	53.229	4.569	1.00	46.12	AAAA
ATOM	1559	CB	ARG	A	200	7.742	53.067	4.544	1.00	45.61	AAAA
ATOM	1560	CG	ARG	A	200	7.228	51.839	3.830	1.00	45.41	AAAA
ATOM	1561	CD	ARG	A	200	6.019	51.272	4.567	1.00	46.65	AAAA
ATOM	1562	NE	ARG	A	200	4.707	51.817	4.179	1.00	46.13	AAAA
ATOM	1563	CZ	ARG	A	200	4.384	53.104	4.076	1.00	44.31	AAAA
ATOM	1564	NH1	ARG	A	200	5.274	54.053	4.317	1.00	44.52	AAAA
ATOM	1565	NH2	ARG	A	200	3.144	53.442	3.754	1.00	42.55	AAAA
ATOM	1566	C	ARG	A	200	9.816	53.152	3.148	1.00	46.20	AAAA
ATOM	1567	O	ARG	A	200	10.078	54.177	2.514	1.00	46.33	AAAA
ATOM	1568	N	SER	A	203	10.801	55.222	-0.550	1.00	47.58	AAAA
ATOM	1569	CA	SER	A	203	11.189	56.209	0.448	1.00	48.12	AAAA
ATOM	1570	CB	SER	A	203	12.642	55.979	0.849	1.00	47.75	AAAA

ATOM	1571	OG	SER	A	203	13.489	56.010	-0.285	1.00	45.70	AAAA
ATOM	1572	C	SER	A	203	11.011	57.664	-0.010	1.00	49.45	AAAA
ATOM	1573	O	SER	A	203	11.959	58.454	0.033	1.00	48.09	AAAA
ATOM	1574	N	PRO	A	204	9.797	58.028	-0.478	1.00	51.09	AAAA
ATOM	1575	CD	PRO	A	204	8.804	57.094	-1.051	1.00	51.73	AAAA
ATOM	1576	CA	PRO	A	204	9.518	59.392	-0.935	1.00	51.61	AAAA
ATOM	1577	CB	PRO	A	204	8.739	59.153	-2.215	1.00	52.00	AAAA
ATOM	1578	CG	PRO	A	204	7.853	58.014	-1.821	1.00	51.12	AAAA
ATOM	1579	C	PRO	A	204	8.685	60.158	0.090	1.00	52.49	AAAA
ATOM	1580	O	PRO	A	204	9.205	60.966	0.871	1.00	52.29	AAAA
ATOM	1581	N	SER	A	205	7.381	59.877	0.065	1.00	53.64	AAAA
ATOM	1582	CA	SER	A	205	6.402	60.489	0.956	1.00	52.92	AAAA
ATOM	1583	CB	SER	A	205	5.431	61.327	0.140	1.00	49.64	AAAA
ATOM	1584	OG	SER	A	205	4.556	62.009	0.996	1.00	48.39	AAAA
ATOM	1585	C	SER	A	205	5.629	59.419	1.741	1.00	53.92	AAAA
ATOM	1586	O	SER	A	205	4.394	59.438	1.787	1.00	53.33	AAAA
ATOM	1587	N	ASP	A	206	6.369	58.486	2.347	1.00	54.56	AAAA
ATOM	1588	CA	ASP	A	206	5.781	57.399	3.137	1.00	54.85	AAAA
ATOM	1589	CB	ASP	A	206	6.283	56.042	2.654	1.00	55.67	AAAA
ATOM	1590	CG	ASP	A	206	6.499	55.999	1.170	1.00	56.06	AAAA
ATOM	1591	OD1	ASP	A	206	5.546	56.287	0.421	1.00	57.84	AAAA
ATOM	1592	OD2	ASP	A	206	7.627	55.672	0.758	1.00	55.94	AAAA
ATOM	1593	C	ASP	A	206	6.190	57.557	4.592	1.00	53.99	AAAA
ATOM	1594	O	ASP	A	206	6.541	56.583	5.259	1.00	53.26	AAAA
ATOM	1595	N	CYS	A	207	6.137	58.792	5.071	1.00	53.24	AAAA
ATOM	1596	CA	CYS	A	207	6.517	59.109	6.433	1.00	52.25	AAAA
ATOM	1597	C	CYS	A	207	5.475	58.777	7.470	1.00	51.34	AAAA
ATOM	1598	O	CYS	A	207	4.383	59.331	7.473	1.00	53.10	AAAA
ATOM	1599	CB	CYS	A	207	6.891	60.566	6.498	1.00	52.31	AAAA
ATOM	1600	SG	CYS	A	207	8.265	60.786	5.355	1.00	54.09	AAAA
ATOM	1601	N	CYS	A	208	5.850	57.864	8.357	1.00	49.04	AAAA
ATOM	1602	CA	CYS	A	208	4.999	57.381	9.425	1.00	45.35	AAAA
ATOM	1603	C	CYS	A	208	4.513	58.457	10.354	1.00	44.62	AAAA
ATOM	1604	O	CYS	A	208	5.156	59.501	10.514	1.00	43.65	AAAA
ATOM	1605	CB	CYS	A	208	5.759	56.358	10.239	1.00	44.09	AAAA
ATOM	1606	SG	CYS	A	208	6.447	55.048	9.206	1.00	40.58	AAAA
ATOM	1607	N	HIS	A	209	3.372	58.185	10.975	1.00	43.55	AAAA
ATOM	1608	CA	HIS	A	209	2.792	59.104	11.935	1.00	42.68	AAAA
ATOM	1609	CB	HIS	A	209	1.548	58.493	12.555	1.00	40.84	AAAA
ATOM	1610	CG	HIS	A	209	0.892	59.379	13.555	1.00	40.84	AAAA
ATOM	1611	CD2	HIS	A	209	-0.396	59.477	13.951	1.00	41.61	AAAA
ATOM	1612	ND1	HIS	A	209	1.589	60.323	14.277	1.00	41.59	AAAA
ATOM	1613	CE1	HIS	A	209	0.757	60.968	15.073	1.00	41.82	AAAA
ATOM	1614	NE2	HIS	A	209	-0.455	60.474	14.895	1.00	42.44	AAAA
ATOM	1615	C	HIS	A	209	3.862	59.256	13.002	1.00	43.80	AAAA
ATOM	1616	O	HIS	A	209	4.512	58.268	13.355	1.00	45.43	AAAA
ATOM	1617	N	ASN	A	210	4.053	60.469	13.520	1.00	43.51	AAAA
ATOM	1618	CA	ASN	A	210	5.080	60.709	14.547	1.00	42.51	AAAA
ATOM	1619	CB	ASN	A	210	4.954	62.139	15.084	1.00	41.45	AAAA
ATOM	1620	CG	ASN	A	210	5.103	63.183	13.995	0.01	41.20	AAAA
ATOM	1621	OD1	ASN	A	210	6.136	63.259	13.329	0.01	40.82	AAAA
ATOM	1622	ND2	ASN	A	210	4.069	63.995	13.808	0.01	40.82	AAAA
ATOM	1623	C	ASN	A	210	5.081	59.706	15.724	1.00	41.52	AAAA
ATOM	1624	O	ASN	A	210	6.136	59.410	16.289	1.00	40.33	AAAA
ATOM	1625	N	GLN	A	211	3.907	59.175	16.070	1.00	40.50	AAAA
ATOM	1626	CA	GLN	A	211	3.769	58.237	17.179	1.00	40.01	AAAA
ATOM	1627	CB	GLN	A	211	2.340	58.277	17.730	1.00	38.65	AAAA
ATOM	1628	CG	GLN	A	211	2.029	59.498	18.569	1.00	36.98	AAAA
ATOM	1629	CD	GLN	A	211	2.975	59.654	19.737	1.00	37.20	AAAA
ATOM	1630	OE1	GLN	A	211	2.989	58.829	20.653	1.00	38.02	AAAA
ATOM	1631	NE2	GLN	A	211	3.782	60.713	19.710	1.00	34.81	AAAA
ATOM	1632	C	GLN	A	211	4.138	56.795	16.874	1.00	40.74	AAAA
ATOM	1633	O	GLN	A	211	3.842	55.893	17.657	1.00	40.19	AAAA
ATOM	1634	N	CYS	A	212	4.778	56.565	15.738	1.00	42.02	AAAA
ATOM	1635	CA	CYS	A	212	5.168	55.209	15.382	1.00	42.80	AAAA
ATOM	1636	C	CYS	A	212	6.620	54.974	15.745	1.00	41.52	AAAA
ATOM	1637	O	CYS	A	212	7.383	55.904	15.959	1.00	38.70	AAAA
ATOM	1638	CB	CYS	A	212	4.999	54.962	13.885	1.00	45.00	AAAA
ATOM	1639	SG	CYS	A	212	3.310	54.985	13.193	1.00	51.05	AAAA
ATOM	1640	N	ALA	A	213	6.993	53.710	15.814	1.00	42.31	AAAA
ATOM	1641	CA	ALA	A	213	8.362	53.352	16.125	1.00	42.69	AAAA
ATOM	1642	CB	ALA	A	213	8.506	53.019	17.601	1.00	43.86	AAAA
ATOM	1643	C	ALA	A	213	8.664	52.140	15.278	1.00	42.32	AAAA
ATOM	1644	O	ALA	A	213	7.766	51.351	14.981	1.00	41.20	AAAA
ATOM	1645	N	ALA	A	214	9.929	52.006	14.895	1.00	42.78	AAAA

ATOM	1646	CA	ALA	A	214	10.393	50.900	14.056	1.00	43.37	AAAA
ATOM	1647	CB	ALA	A	214	9.797	49.561	14.531	1.00	43.18	AAAA
ATOM	1648	C	ALA	A	214	10.018	51.166	12.602	1.00	42.48	AAAA
ATOM	1649	O	ALA	A	214	10.872	51.166	11.719	1.00	42.66	AAAA
ATOM	1650	N	GLY	A	215	8.737	51.407	12.361	1.00	40.93	AAAA
ATOM	1651	CA	GLY	A	215	8.292	51.679	11.013	1.00	40.42	AAAA
ATOM	1652	C	GLY	A	215	6.793	51.613	10.973	1.00	39.70	AAAA
ATOM	1653	O	GLY	A	215	6.176	51.354	11.995	1.00	38.99	AAAA
ATOM	1654	N	CYS	A	216	6.205	51.836	9.804	1.00	40.57	AAAA
ATOM	1655	CA	CYS	A	216	4.756	51.804	9.678	1.00	42.39	AAAA
ATOM	1656	C	CYS	A	216	4.303	51.190	8.396	1.00	44.07	AAAA
ATOM	1657	O	CYS	A	216	5.095	50.921	7.508	1.00	45.43	AAAA
ATOM	1658	CB	CYS	A	216	4.180	53.198	9.720	1.00	42.46	AAAA
ATOM	1659	SG	CYS	A	216	4.769	54.274	8.384	1.00	41.15	AAAA
ATOM	1660	N	THR	A	217	2.996	51.019	8.292	1.00	45.80	AAAA
ATOM	1661	CA	THR	A	217	2.396	50.425	7.121	1.00	47.24	AAAA
ATOM	1662	CB	THR	A	217	1.627	49.173	7.526	1.00	46.37	AAAA
ATOM	1663	OG1	THR	A	217	1.118	48.536	6.358	1.00	48.86	AAAA
ATOM	1664	CG2	THR	A	217	0.470	49.530	8.443	1.00	46.90	AAAA
ATOM	1665	C	THR	A	217	1.453	51.402	6.422	1.00	49.16	AAAA
ATOM	1666	O	THR	A	217	0.364	51.024	6.001	1.00	49.53	AAAA
ATOM	1667	N	GLY	A	218	1.876	52.656	6.287	1.00	51.38	AAAA
ATOM	1668	CA	GLY	A	218	1.027	53.650	5.648	1.00	54.01	AAAA
ATOM	1669	C	GLY	A	218	0.419	54.572	6.693	1.00	56.18	AAAA
ATOM	1670	O	GLY	A	218	-0.801	54.661	6.826	1.00	55.77	AAAA
ATOM	1671	N	PRO	A	219	1.263	55.312	7.425	1.00	58.08	AAAA
ATOM	1672	CD	PRO	A	219	2.571	55.685	6.867	1.00	59.41	AAAA
ATOM	1673	CA	PRO	A	219	0.892	56.254	8.488	1.00	59.02	AAAA
ATOM	1674	CB	PRO	A	219	2.032	57.271	8.470	1.00	59.48	AAAA
ATOM	1675	CG	PRO	A	219	2.572	57.167	7.077	1.00	60.15	AAAA
ATOM	1676	C	PRO	A	219	-0.466	56.916	8.381	1.00	58.73	AAAA
ATOM	1677	O	PRO	A	219	-0.856	57.414	7.327	1.00	58.44	AAAA
ATOM	1678	N	ARG	A	220	-1.167	56.908	9.508	1.00	58.69	AAAA
ATOM	1679	CA	ARG	A	220	-2.494	57.491	9.649	1.00	59.89	AAAA
ATOM	1680	CB	ARG	A	220	-3.474	56.880	8.639	1.00	60.19	AAAA
ATOM	1681	CG	ARG	A	220	-4.851	57.537	8.608	1.00	61.45	AAAA
ATOM	1682	CD	ARG	A	220	-5.848	56.671	7.840	1.00	63.74	AAAA
ATOM	1683	NE	ARG	A	220	-7.194	57.247	7.805	1.00	65.84	AAAA
ATOM	1684	CZ	ARG	A	220	-8.274	56.613	7.350	1.00	66.41	AAAA
ATOM	1685	NH1	ARG	A	220	-8.175	55.374	6.890	1.00	66.13	AAAA
ATOM	1686	NH2	ARG	A	220	-9.456	57.219	7.351	1.00	66.68	AAAA
ATOM	1687	C	ARG	A	220	-2.946	57.175	11.079	1.00	60.05	AAAA
ATOM	1688	O	ARG	A	220	-4.117	56.854	11.319	1.00	60.28	AAAA
ATOM	1689	N	GLU	A	221	-1.996	57.259	12.015	1.00	58.92	AAAA
ATOM	1690	CA	GLU	A	221	-2.240	56.994	13.434	1.00	57.19	AAAA
ATOM	1691	CB	GLU	A	221	-3.448	57.799	13.928	1.00	57.05	AAAA
ATOM	1692	CG	GLU	A	221	-3.453	59.258	13.512	1.00	56.62	AAAA
ATOM	1693	CD	GLU	A	221	-4.656	60.012	14.044	0.01	56.65	AAAA
ATOM	1694	OE1	GLU	A	221	-4.811	60.092	15.281	0.01	56.64	AAAA
ATOM	1695	OE2	GLU	A	221	-5.446	60.525	13.224	0.01	56.65	AAAA
ATOM	1696	C	GLU	A	221	-2.485	55.511	13.698	1.00	56.31	AAAA
ATOM	1697	O	GLU	A	221	-2.174	54.994	14.769	1.00	55.31	AAAA
ATOM	1698	N	SER	A	222	-3.041	54.830	12.706	1.00	56.18	AAAA
ATOM	1699	CA	SER	A	222	-3.355	53.419	12.832	1.00	56.43	AAAA
ATOM	1700	CB	SER	A	222	-4.870	53.221	12.759	1.00	57.00	AAAA
ATOM	1701	OG	SER	A	222	-5.199	51.846	12.645	1.00	58.42	AAAA
ATOM	1702	C	SER	A	222	-2.686	52.582	11.757	1.00	55.83	AAAA
ATOM	1703	O	SER	A	222	-3.353	51.862	11.014	1.00	57.02	AAAA
ATOM	1704	N	ASP	A	223	-1.366	52.663	11.679	1.00	54.27	AAAA
ATOM	1705	CA	ASP	A	223	-0.628	51.904	10.685	1.00	52.73	AAAA
ATOM	1706	CB	ASP	A	223	-0.605	52.676	9.370	1.00	54.05	AAAA
ATOM	1707	CG	ASP	A	223	-1.999	53.057	8.902	1.00	54.95	AAAA
ATOM	1708	OD1	ASP	A	223	-2.819	52.148	8.656	1.00	55.77	AAAA
ATOM	1709	OD2	ASP	A	223	-2.278	54.266	8.788	1.00	55.74	AAAA
ATOM	1710	C	ASP	A	223	0.774	51.704	11.212	1.00	51.38	AAAA
ATOM	1711	O	ASP	A	223	1.700	51.361	10.475	1.00	50.53	AAAA
ATOM	1712	N	CYS	A	224	0.915	51.928	12.511	1.00	50.29	AAAA
ATOM	1713	CA	CYS	A	224	2.197	51.791	13.180	1.00	48.36	AAAA
ATOM	1714	C	CYS	A	224	2.590	50.328	13.380	1.00	45.79	AAAA
ATOM	1715	O	CYS	A	224	1.741	49.445	13.478	1.00	44.36	AAAA
ATOM	1716	CB	CYS	A	224	2.158	52.470	14.558	1.00	49.31	AAAA
ATOM	1717	SG	CYS	A	224	2.096	54.298	14.669	1.00	50.71	AAAA
ATOM	1718	N	LEU	A	225	3.888	50.076	13.423	1.00	43.13	AAAA
ATOM	1719	CA	LEU	A	225	4.356	48.734	13.688	1.00	41.44	AAAA
ATOM	1720	CB	LEU	A	225	5.842	48.606	13.352	1.00	40.29	AAAA

ATOM	1721	CG	LEU	A	225	6.293	48.660	11.888	1.00	38.67	AAAA
ATOM	1722	CD1	LEU	A	225	7.808	48.619	11.837	1.00	38.18	AAAA
ATOM	1723	CD2	LEU	A	225	5.710	47.508	11.108	1.00	37.49	AAAA
ATOM	1724	C	LEU	A	225	4.141	48.635	15.200	1.00	41.25	AAAA
ATOM	1725	O	LEU	A	225	3.179	48.018	15.668	1.00	41.17	AAAA
ATOM	1726	N	VAL	A	226	5.035	49.274	15.952	1.00	39.88	AAAA
ATOM	1727	CA	VAL	A	226	4.950	49.313	17.408	1.00	38.79	AAAA
ATOM	1728	CB	VAL	A	226	6.267	48.829	18.066	1.00	37.00	AAAA
ATOM	1729	CG1	VAL	A	226	6.128	48.842	19.580	0.01	38.00	AAAA
ATOM	1730	CG2	VAL	A	226	6.613	47.434	17.572	0.01	38.01	AAAA
ATOM	1731	C	VAL	A	226	4.695	50.778	17.799	1.00	39.07	AAAA
ATOM	1732	O	VAL	A	226	5.159	51.700	17.095	1.00	39.05	AAAA
ATOM	1733	N	CYS	A	227	3.954	50.988	18.897	1.00	37.56	AAAA
ATOM	1734	CA	CYS	A	227	3.640	52.331	19.386	1.00	35.54	AAAA
ATOM	1735	C	CYS	A	227	4.790	52.879	20.190	1.00	36.25	AAAA
ATOM	1736	O	CYS	A	227	5.363	52.183	21.012	1.00	35.94	AAAA
ATOM	1737	CB	CYS	A	227	2.394	52.336	20.263	1.00	35.71	AAAA
ATOM	1738	SG	CYS	A	227	0.817	52.196	19.375	1.00	31.66	AAAA
ATOM	1739	N	ARG	A	228	5.103	54.146	19.939	1.00	37.65	AAAA
ATOM	1740	CA	ARG	A	228	6.195	54.887	20.572	1.00	37.09	AAAA
ATOM	1741	CB	ARG	A	228	6.414	56.197	19.796	1.00	39.17	AAAA
ATOM	1742	CG	ARG	A	228	7.628	57.012	20.192	1.00	42.04	AAAA
ATOM	1743	CD	ARG	A	228	8.871	56.604	19.416	1.00	44.16	AAAA
ATOM	1744	NE	ARG	A	228	8.739	56.891	17.990	1.00	46.13	AAAA
ATOM	1745	CZ	ARG	A	228	9.717	56.758	17.098	1.00	47.14	AAAA
ATOM	1746	NH1	ARG	A	228	10.917	56.337	17.473	1.00	47.40	AAAA
ATOM	1747	NH2	ARG	A	228	9.495	57.065	15.828	1.00	48.01	AAAA
ATOM	1748	C	ARG	A	228	5.914	55.202	22.039	1.00	36.43	AAAA
ATOM	1749	O	ARG	A	228	6.841	55.377	22.826	1.00	35.10	AAAA
ATOM	1750	N	LYS	A	229	4.635	55.286	22.401	1.00	35.70	AAAA
ATOM	1751	CA	LYS	A	229	4.271	55.593	23.776	1.00	35.59	AAAA
ATOM	1752	CB	LYS	A	229	4.078	57.103	23.952	1.00	35.75	AAAA
ATOM	1753	CG	LYS	A	229	5.366	57.908	23.920	1.00	35.21	AAAA
ATOM	1754	CD	LYS	A	229	5.139	59.344	24.354	0.01	34.93	AAAA
ATOM	1755	CE	LYS	A	229	6.440	60.131	24.354	0.01	34.60	AAAA
ATOM	1756	NZ	LYS	A	229	6.250	61.535	24.812	0.01	34.66	AAAA
ATOM	1757	C	LYS	A	229	3.037	54.865	24.290	1.00	36.26	AAAA
ATOM	1758	O	LYS	A	229	3.136	54.025	25.177	1.00	37.90	AAAA
ATOM	1759	N	PHE	A	230	1.871	55.196	23.750	1.00	36.73	AAAA
ATOM	1760	CA	PHE	A	230	0.632	54.568	24.193	1.00	36.75	AAAA
ATOM	1761	CB	PHE	A	230	-0.294	55.606	24.838	1.00	35.92	AAAA
ATOM	1762	CG	PHE	A	230	0.004	55.875	26.288	1.00	35.73	AAAA
ATOM	1763	CD1	PHE	A	230	1.218	56.425	26.680	1.00	35.26	AAAA
ATOM	1764	CD2	PHE	A	230	-0.926	55.561	27.266	1.00	35.45	AAAA
ATOM	1765	CE1	PHE	A	230	1.503	56.654	28.021	1.00	35.54	AAAA
ATOM	1766	CE2	PHE	A	230	-0.650	55.786	28.605	1.00	36.38	AAAA
ATOM	1767	CZ	PHE	A	230	0.570	56.335	28.984	1.00	35.41	AAAA
ATOM	1768	C	PHE	A	230	-0.108	53.888	23.059	1.00	38.00	AAAA
ATOM	1769	O	PHE	A	230	0.028	54.262	21.899	1.00	38.65	AAAA
ATOM	1770	N	ARG	A	231	-0.904	52.890	23.409	1.00	39.15	AAAA
ATOM	1771	CA	ARG	A	231	-1.686	52.149	22.433	1.00	40.69	AAAA
ATOM	1772	CB	ARG	A	231	-1.318	50.662	22.496	1.00	42.85	AAAA
ATOM	1773	CG	ARG	A	231	-2.066	49.747	21.523	1.00	46.15	AAAA
ATOM	1774	CD	ARG	A	231	-1.686	48.276	21.757	1.00	48.43	AAAA
ATOM	1775	NE	ARG	A	231	-2.475	47.645	22.823	1.00	51.09	AAAA
ATOM	1776	CZ	ARG	A	231	-2.048	46.645	23.598	1.00	50.72	AAAA
ATOM	1777	NH1	ARG	A	231	-0.826	46.154	23.443	1.00	51.16	AAAA
ATOM	1778	NH2	ARG	A	231	-2.850	46.119	24.517	1.00	49.04	AAAA
ATOM	1779	C	ARG	A	231	-3.149	52.330	22.792	1.00	40.51	AAAA
ATOM	1780	O	ARG	A	231	-3.583	51.840	23.828	1.00	41.99	AAAA
ATOM	1781	N	ASP	A	232	-3.898	53.064	21.970	1.00	40.09	AAAA
ATOM	1782	CA	ASP	A	232	-5.326	53.262	22.222	1.00	39.61	AAAA
ATOM	1783	CB	ASP	A	232	-5.780	54.674	21.845	1.00	38.66	AAAA
ATOM	1784	CG	ASP	A	232	-7.148	55.024	22.426	1.00	38.60	AAAA
ATOM	1785	OD1	ASP	A	232	-7.712	56.064	22.043	1.00	40.26	AAAA
ATOM	1786	OD2	ASP	A	232	-7.666	54.271	23.270	1.00	37.24	AAAA
ATOM	1787	C	ASP	A	232	-6.018	52.228	21.345	1.00	39.88	AAAA
ATOM	1788	O	ASP	A	232	-6.382	52.480	20.197	1.00	38.47	AAAA
ATOM	1789	N	GLU	A	233	-6.179	51.046	21.920	1.00	41.63	AAAA
ATOM	1790	CA	GLU	A	233	-6.769	49.915	21.243	1.00	42.44	AAAA
ATOM	1791	CB	GLU	A	233	-8.259	50.128	20.984	1.00	44.32	AAAA
ATOM	1792	CG	GLU	A	233	-8.995	48.813	20.813	1.00	48.29	AAAA
ATOM	1793	CD	GLU	A	233	-8.727	47.835	21.967	1.00	51.67	AAAA
ATOM	1794	OE1	GLU	A	233	-9.292	48.022	23.069	1.00	52.51	AAAA
ATOM	1795	OE2	GLU	A	233	-7.939	46.882	21.776	1.00	52.98	AAAA

ATOM	1796	C	GLU	A	233	-6.030	49.694	19.941	1.00	41.69	AAAA
ATOM	1797	O	GLU	A	233	-4.978	49.063	19.924	1.00	41.89	AAAA
ATOM	1798	N	ALA	A	234	-6.544	50.243	18.855	1.00	41.27	AAAA
ATOM	1799	CA	ALA	A	234	-5.893	50.032	17.575	1.00	42.27	AAAA
ATOM	1800	CB	ALA	A	234	-6.938	49.572	16.553	1.00	44.02	AAAA
ATOM	1801	C	ALA	A	234	-5.107	51.224	17.030	1.00	41.41	AAAA
ATOM	1802	O	ALA	A	234	-4.851	51.310	15.830	1.00	41.98	AAAA
ATOM	1803	N	THR	A	235	-4.690	52.128	17.903	1.00	40.03	AAAA
ATOM	1804	CA	THR	A	235	-3.961	53.299	17.439	1.00	39.19	AAAA
ATOM	1805	CB	THR	A	235	-4.929	54.471	17.274	1.00	39.66	AAAA
ATOM	1806	OG1	THR	A	235	-5.953	54.107	16.342	1.00	39.44	AAAA
ATOM	1807	CG2	THR	A	235	-4.204	55.709	16.784	1.00	41.07	AAAA
ATOM	1808	C	THR	A	235	-2.871	53.707	18.410	1.00	37.83	AAAA
ATOM	1809	O	THR	A	235	-2.876	53.273	19.550	1.00	38.57	AAAA
ATOM	1810	N	CYS	A	236	-1.930	54.533	17.966	1.00	37.08	AAAA
ATOM	1811	CA	CYS	A	236	-0.878	54.997	18.866	1.00	36.69	AAAA
ATOM	1812	C	CYS	A	236	-1.179	56.415	19.320	1.00	36.04	AAAA
ATOM	1813	O	CYS	A	236	-1.659	57.240	18.542	1.00	35.63	AAAA
ATOM	1814	CB	CYS	A	236	0.505	54.975	18.197	1.00	36.79	AAAA
ATOM	1815	SG	CYS	A	236	1.131	53.327	17.732	1.00	38.41	AAAA
ATOM	1816	N	LYS	A	237	-0.898	56.689	20.587	1.00	35.48	AAAA
ATOM	1817	CA	LYS	A	237	-1.117	58.014	21.151	1.00	34.54	AAAA
ATOM	1818	CB	LYS	A	237	-2.385	58.018	21.997	1.00	32.65	AAAA
ATOM	1819	CG	LYS	A	237	-3.607	57.482	21.297	1.00	29.86	AAAA
ATOM	1820	CD	LYS	A	237	-3.984	58.340	20.127	1.00	27.86	AAAA
ATOM	1821	CE	LYS	A	237	-5.368	58.006	19.652	1.00	26.79	AAAA
ATOM	1822	NZ	LYS	A	237	-6.343	58.216	20.736	1.00	26.75	AAAA
ATOM	1823	C	LYS	A	237	0.069	58.416	22.025	1.00	35.04	AAAA
ATOM	1824	O	LYS	A	237	0.884	57.579	22.406	1.00	33.72	AAAA
ATOM	1825	N	ASP	A	238	0.158	59.704	22.332	1.00	36.22	AAAA
ATOM	1826	CA	ASP	A	238	1.223	60.234	23.178	1.00	36.75	AAAA
ATOM	1827	CB	ASP	A	238	1.614	61.628	22.703	1.00	37.69	AAAA
ATOM	1828	CG	ASP	A	238	2.618	62.294	23.618	1.00	40.60	AAAA
ATOM	1829	OD1	ASP	A	238	3.720	61.729	23.805	1.00	41.68	AAAA
ATOM	1830	OD2	ASP	A	238	2.305	63.387	24.150	1.00	41.14	AAAA
ATOM	1831	C	ASP	A	238	0.672	60.319	24.594	1.00	36.57	AAAA
ATOM	1832	O	ASP	A	238	1.405	60.321	25.585	1.00	36.18	AAAA
ATOM	1833	N	THR	A	239	-0.646	60.367	24.667	1.00	35.86	AAAA
ATOM	1834	CA	THR	A	239	-1.337	60.482	25.921	1.00	37.05	AAAA
ATOM	1835	CB	THR	A	239	-1.310	61.954	26.404	1.00	37.76	AAAA
ATOM	1836	OG1	THR	A	239	-0.077	62.202	27.094	1.00	38.43	AAAA
ATOM	1837	CG2	THR	A	239	-2.489	62.263	27.315	1.00	38.92	AAAA
ATOM	1838	C	THR	A	239	-2.754	60.045	25.648	1.00	36.84	AAAA
ATOM	1839	O	THR	A	239	-3.394	60.559	24.730	1.00	37.41	AAAA
ATOM	1840	N	CYS	A	240	-3.248	59.095	26.434	1.00	36.64	AAAA
ATOM	1841	CA	CYS	A	240	-4.604	58.622	26.224	1.00	36.25	AAAA
ATOM	1842	C	CYS	A	240	-5.495	59.827	26.291	1.00	35.05	AAAA
ATOM	1843	O	CYS	A	240	-5.182	60.796	26.969	1.00	34.52	AAAA
ATOM	1844	CB	CYS	A	240	-5.037	57.632	27.307	1.00	37.17	AAAA
ATOM	1845	SG	CYS	A	240	-3.936	56.207	27.526	1.00	37.97	AAAA
ATOM	1846	N	PRO	A	241	-6.603	59.803	25.555	1.00	35.08	AAAA
ATOM	1847	CD	PRO	A	241	-7.008	58.854	24.505	1.00	35.22	AAAA
ATOM	1848	CA	PRO	A	241	-7.501	60.956	25.606	1.00	35.36	AAAA
ATOM	1849	CB	PRO	A	241	-8.549	60.618	24.540	1.00	34.35	AAAA
ATOM	1850	CG	PRO	A	241	-8.474	59.118	24.413	1.00	34.55	AAAA
ATOM	1851	C	PRO	A	241	-8.066	61.101	27.027	1.00	33.47	AAAA
ATOM	1852	O	PRO	A	241	-8.622	60.164	27.581	1.00	32.74	AAAA
ATOM	1853	N	PRO	A	242	-7.911	62.286	27.631	1.00	33.27	AAAA
ATOM	1854	CD	PRO	A	242	-7.326	63.487	27.021	1.00	34.97	AAAA
ATOM	1855	CA	PRO	A	242	-8.377	62.590	28.981	1.00	34.95	AAAA
ATOM	1856	CB	PRO	A	242	-8.038	64.064	29.140	1.00	35.00	AAAA
ATOM	1857	CG	PRO	A	242	-6.883	64.248	28.228	1.00	35.29	AAAA
ATOM	1858	C	PRO	A	242	-9.849	62.343	29.156	1.00	35.57	AAAA
ATOM	1859	O	PRO	A	242	-10.629	62.559	28.229	1.00	35.45	AAAA
ATOM	1860	N	LEU	A	243	-10.218	61.897	30.354	1.00	36.94	AAAA
ATOM	1861	CA	LEU	A	243	-11.609	61.624	30.682	1.00	37.91	AAAA
ATOM	1862	CB	LEU	A	243	-11.743	61.163	32.135	1.00	37.75	AAAA
ATOM	1863	CG	LEU	A	243	-11.280	59.764	32.555	1.00	37.72	AAAA
ATOM	1864	CD1	LEU	A	243	-11.605	59.575	34.023	1.00	36.74	AAAA
ATOM	1865	CD2	LEU	A	243	-11.969	58.689	31.733	1.00	36.10	AAAA
ATOM	1866	C	LEU	A	243	-12.444	62.880	30.484	1.00	38.88	AAAA
ATOM	1867	O	LEU	A	243	-13.635	62.801	30.186	1.00	39.81	AAAA
ATOM	1868	N	MET	A	244	-11.815	64.040	30.657	1.00	38.61	AAAA
ATOM	1869	CA	MET	A	244	-12.504	65.315	30.493	1.00	37.67	AAAA
ATOM	1870	CB	MET	A	244	-12.828	65.922	31.852	1.00	39.24	AAAA

ATOM	1871	CG	MET	A	244	-13.735	65.066	32.686	1.00	41.36	AAAA
ATOM	1872	SD	MET	A	244	-15.168	65.991	33.205	1.00	45.46	AAAA
ATOM	1873	CE	MET	A	244	-16.462	65.345	32.080	1.00	44.42	AAAA
ATOM	1874	C	MET	A	244	-11.647	66.280	29.697	1.00	35.85	AAAA
ATOM	1875	O	MET	A	244	-10.461	66.039	29.496	1.00	35.41	AAAA
ATOM	1876	N	LEU	A	245	-12.253	67.375	29.255	1.00	33.97	AAAA
ATOM	1877	CA	LEU	A	245	-11.548	68.367	28.457	1.00	32.66	AAAA
ATOM	1878	CB	LEU	A	245	-11.767	68.074	26.973	1.00	30.77	AAAA
ATOM	1879	CG	LEU	A	245	-10.543	67.835	26.095	1.00	29.40	AAAA
ATOM	1880	CD1	LEU	A	245	-9.554	66.940	26.798	1.00	29.86	AAAA
ATOM	1881	CD2	LEU	A	245	-10.982	67.200	24.803	1.00	29.46	AAAA
ATOM	1882	C	LEU	A	245	-12.036	69.773	28.776	1.00	33.23	AAAA
ATOM	1883	O	LEU	A	245	-13.239	70.004	28.919	1.00	32.27	AAAA
ATOM	1884	N	TYR	A	246	-11.092	70.709	28.875	1.00	32.69	AAAA
ATOM	1885	CA	TYR	A	246	-11.399	72.108	29.181	1.00	30.97	AAAA
ATOM	1886	CB	TYR	A	246	-10.132	72.831	29.586	1.00	29.20	AAAA
ATOM	1887	CG	TYR	A	246	-10.344	74.253	30.040	1.00	27.33	AAAA
ATOM	1888	CD1	TYR	A	246	-11.026	74.538	31.231	1.00	25.88	AAAA
ATOM	1889	CE1	TYR	A	246	-11.136	75.856	31.700	1.00	23.69	AAAA
ATOM	1890	CD2	TYR	A	246	-9.791	75.315	29.325	1.00	25.84	AAAA
ATOM	1891	CE2	TYR	A	246	-9.898	76.625	29.785	1.00	24.41	AAAA
ATOM	1892	CZ	TYR	A	246	-10.566	76.885	30.971	1.00	23.70	AAAA
ATOM	1893	OH	TYR	A	246	-10.633	78.170	31.424	1.00	24.81	AAAA
ATOM	1894	C	TYR	A	246	-12.024	72.872	28.025	1.00	30.75	AAAA
ATOM	1895	O	TYR	A	246	-11.565	72.793	26.892	1.00	31.52	AAAA
ATOM	1896	N	ASN	A	247	-13.069	73.627	28.320	1.00	30.78	AAAA
ATOM	1897	CA	ASN	A	247	-13.731	74.413	27.301	1.00	31.14	AAAA
ATOM	1898	CB	ASN	A	247	-15.238	74.339	27.485	1.00	32.19	AAAA
ATOM	1899	CG	ASN	A	247	-15.970	75.131	26.452	1.00	35.34	AAAA
ATOM	1900	OD1	ASN	A	247	-15.626	76.282	26.181	1.00	36.08	AAAA
ATOM	1901	ND2	ASN	A	247	-16.990	74.531	25.861	1.00	37.73	AAAA
ATOM	1902	C	ASN	A	247	-13.243	75.846	27.488	1.00	30.59	AAAA
ATOM	1903	O	ASN	A	247	-13.475	76.440	28.529	1.00	30.73	AAAA
ATOM	1904	N	PRO	A	248	-12.560	76.415	26.480	1.00	30.11	AAAA
ATOM	1905	CD	PRO	A	248	-12.191	75.736	25.234	1.00	29.14	AAAA
ATOM	1906	CA	PRO	A	248	-12.006	77.777	26.487	1.00	31.18	AAAA
ATOM	1907	CB	PRO	A	248	-11.124	77.805	25.234	1.00	30.32	AAAA
ATOM	1908	CG	PRO	A	248	-10.870	76.374	24.941	1.00	29.86	AAAA
ATOM	1909	C	PRO	A	248	-13.017	78.913	26.461	1.00	31.26	AAAA
ATOM	1910	O	PRO	A	248	-12.714	80.034	26.853	1.00	31.72	AAAA
ATOM	1911	N	THR	A	249	-14.214	78.618	25.981	1.00	31.91	AAAA
ATOM	1912	CA	THR	A	249	-15.248	79.621	25.883	1.00	33.02	AAAA
ATOM	1913	CB	THR	A	249	-16.131	79.381	24.643	1.00	34.21	AAAA
ATOM	1914	OG1	THR	A	249	-17.142	78.414	24.951	1.00	35.70	AAAA
ATOM	1915	CG2	THR	A	249	-15.295	78.857	23.487	1.00	35.54	AAAA
ATOM	1916	C	THR	A	249	-16.149	79.594	27.102	1.00	33.36	AAAA
ATOM	1917	O	THR	A	249	-16.839	80.559	27.393	1.00	35.14	AAAA
ATOM	1918	N	THR	A	250	-16.140	78.482	27.814	1.00	32.21	AAAA
ATOM	1919	CA	THR	A	250	-16.996	78.332	28.967	1.00	31.95	AAAA
ATOM	1920	CB	THR	A	250	-17.789	77.018	28.850	1.00	33.17	AAAA
ATOM	1921	OG1	THR	A	250	-18.606	77.083	27.683	1.00	36.02	AAAA
ATOM	1922	CG2	THR	A	250	-18.686	76.801	30.050	1.00	34.52	AAAA
ATOM	1923	C	THR	A	250	-16.257	78.352	30.286	1.00	30.68	AAAA
ATOM	1924	O	THR	A	250	-16.861	78.542	31.332	1.00	30.97	AAAA
ATOM	1925	N	TYR	A	251	-14.949	78.158	30.239	1.00	30.04	AAAA
ATOM	1926	CA	TYR	A	251	-14.166	78.121	31.452	1.00	28.43	AAAA
ATOM	1927	CB	TYR	A	251	-14.231	79.464	32.161	1.00	28.54	AAAA
ATOM	1928	CG	TYR	A	251	-13.629	80.592	31.385	1.00	29.41	AAAA
ATOM	1929	CD1	TYR	A	251	-14.351	81.247	30.398	1.00	30.28	AAAA
ATOM	1930	CE1	TYR	A	251	-13.765	82.273	29.645	1.00	32.51	AAAA
ATOM	1931	CD2	TYR	A	251	-12.313	80.981	31.612	1.00	30.59	AAAA
ATOM	1932	CE2	TYR	A	251	-11.719	81.997	30.873	1.00	31.82	AAAA
ATOM	1933	CZ	TYR	A	251	-12.444	82.642	29.889	1.00	32.62	AAAA
ATOM	1934	OH	TYR	A	251	-11.837	83.643	29.151	1.00	33.88	AAAA
ATOM	1935	C	TYR	A	251	-14.745	77.030	32.354	1.00	29.59	AAAA
ATOM	1936	O	TYR	A	251	-15.039	77.263	33.535	1.00	29.67	AAAA
ATOM	1937	N	GLN	A	252	-14.933	75.846	31.776	1.00	28.62	AAAA
ATOM	1938	CA	GLN	A	252	-15.452	74.687	32.490	1.00	29.40	AAAA
ATOM	1939	CB	GLN	A	252	-16.946	74.514	32.264	1.00	29.84	AAAA
ATOM	1940	CG	GLN	A	252	-17.832	75.541	32.923	1.00	32.05	AAAA
ATOM	1941	CD	GLN	A	252	-17.663	75.580	34.421	1.00	33.64	AAAA
ATOM	1942	OE1	GLN	A	252	-17.677	74.545	35.091	1.00	33.24	AAAA
ATOM	1943	NE2	GLN	A	252	-17.504	76.781	34.961	1.00	33.51	AAAA
ATOM	1944	C	GLN	A	252	-14.745	73.514	31.870	1.00	31.17	AAAA
ATOM	1945	O	GLN	A	252	-13.975	73.693	30.934	1.00	32.89	AAAA

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ATOM	1946	N	MET A 253	-14.997	72.317	32.385	1.00	32.28	AAAA
ATOM	1947	CA	MET A 253	-14.386	71.114	31.839	1.00	32.69	AAAA
ATOM	1948	CB	MET A 253	-13.837	70.227	32.943	1.00	31.28	AAAA
ATOM	1949	CG	MET A 253	-12.778	70.870	33.783	1.00	30.45	AAAA
ATOM	1950	SD	MET A 253	-11.468	71.379	32.735	1.00	31.16	AAAA
ATOM	1951	CE	MET A 253	-10.909	69.816	32.150	1.00	30.52	AAAA
ATOM	1952	C	MET A 253	-15.510	70.387	31.176	1.00	35.61	AAAA
ATOM	1953	O	MET A 253	-16.649	70.507	31.619	1.00	37.68	AAAA
ATOM	1954	N	ASP A 254	-15.203	69.626	30.128	1.00	38.31	AAAA
ATOM	1955	CA	ASP A 254	-16.218	68.856	29.403	1.00	38.75	AAAA
ATOM	1956	CB	ASP A 254	-16.350	69.395	27.980	1.00	38.58	AAAA
ATOM	1957	CG	ASP A 254	-17.101	70.717	27.930	1.00	38.04	AAAA
ATOM	1958	OD1	ASP A 254	-16.696	71.607	27.148	1.00	37.49	AAAA
ATOM	1959	OD2	ASP A 254	-18.101	70.863	28.673	1.00	37.97	AAAA
ATOM	1960	C	ASP A 254	-15.946	67.349	29.400	1.00	40.16	AAAA
ATOM	1961	O	ASP A 254	-15.006	66.880	30.037	1.00	40.02	AAAA
ATOM	1962	N	VAL A 255	-16.749	66.593	28.661	1.00	42.11	AAAA
ATOM	1963	CA	VAL A 255	-16.619	65.140	28.655	1.00	43.79	AAAA
ATOM	1964	CB	VAL A 255	-18.008	64.496	28.628	1.00	43.56	AAAA
ATOM	1965	CG1	VAL A 255	-17.919	63.057	29.135	1.00	44.24	AAAA
ATOM	1966	CG2	VAL A 255	-18.969	65.310	29.482	1.00	44.16	AAAA
ATOM	1967	C	VAL A 255	-15.748	64.383	27.642	1.00	45.22	AAAA
ATOM	1968	O	VAL A 255	-15.302	63.276	27.940	1.00	46.20	AAAA
ATOM	1969	N	ASN A 256	-15.489	64.939	26.466	1.00	46.29	AAAA
ATOM	1970	CA	ASN A 256	-14.679	64.207	25.482	1.00	47.64	AAAA
ATOM	1971	CB	ASN A 256	-13.180	64.373	25.767	1.00	46.64	AAAA
ATOM	1972	CG	ASN A 256	-12.311	63.659	24.751	0.01	46.65	AAAA
ATOM	1973	OD1	ASN A 256	-12.367	63.949	23.557	0.01	46.47	AAAA
ATOM	1974	ND2	ASN A 256	-11.502	62.717	25.222	0.01	46.44	AAAA
ATOM	1975	C	ASN A 256	-15.026	62.726	25.567	1.00	48.33	AAAA
ATOM	1976	O	ASN A 256	-14.246	61.943	26.092	1.00	48.82	AAAA
ATOM	1977	N	PRO A 257	-16.206	62.323	25.062	1.00	49.73	AAAA
ATOM	1978	CD	PRO A 257	-17.178	63.080	24.252	1.00	50.42	AAAA
ATOM	1979	CA	PRO A 257	-16.578	60.905	25.131	1.00	49.50	AAAA
ATOM	1980	CB	PRO A 257	-17.911	60.855	24.379	1.00	50.50	AAAA
ATOM	1981	CG	PRO A 257	-17.800	61.997	23.407	1.00	50.52	AAAA
ATOM	1982	C	PRO A 257	-15.518	59.981	24.545	1.00	48.51	AAAA
ATOM	1983	O	PRO A 257	-15.456	58.803	24.889	1.00	47.21	AAAA
ATOM	1984	N	GLU A 258	-14.684	60.520	23.663	1.00	48.27	AAAA
ATOM	1985	CA	GLU A 258	-13.615	59.730	23.074	1.00	49.91	AAAA
ATOM	1986	CB	GLU A 258	-13.156	60.334	21.743	1.00	51.32	AAAA
ATOM	1987	CG	GLU A 258	-14.157	60.143	20.621	1.00	55.56	AAAA
ATOM	1988	CD	GLU A 258	-14.308	58.686	20.221	1.00	58.36	AAAA
ATOM	1989	OE1	GLU A 258	-13.352	58.137	19.626	1.00	59.74	AAAA
ATOM	1990	OE2	GLU A 258	-15.373	58.090	20.508	1.00	59.17	AAAA
ATOM	1991	C	GLU A 258	-12.446	59.694	24.049	1.00	49.10	AAAA
ATOM	1992	O	GLU A 258	-11.338	60.090	23.695	1.00	50.03	AAAA
ATOM	1993	N	GLY A 259	-12.705	59.213	25.268	1.00	47.21	AAAA
ATOM	1994	CA	GLY A 259	-11.677	59.141	26.296	1.00	44.44	AAAA
ATOM	1995	C	GLY A 259	-11.509	57.778	26.942	1.00	43.20	AAAA
ATOM	1996	O	GLY A 259	-12.439	56.977	26.976	1.00	42.66	AAAA
ATOM	1997	N	LYS A 260	-10.315	57.526	27.471	1.00	42.69	AAAA
ATOM	1998	CA	LYS A 260	-9.992	56.249	28.106	1.00	41.75	AAAA
ATOM	1999	CB	LYS A 260	-9.098	55.423	27.176	1.00	43.03	AAAA
ATOM	2000	CG	LYS A 260	-9.364	55.589	25.686	1.00	44.51	AAAA
ATOM	2001	CD	LYS A 260	-10.562	54.783	25.208	1.00	44.89	AAAA
ATOM	2002	CE	LYS A 260	-10.537	54.674	23.692	1.00	45.48	AAAA
ATOM	2003	NZ	LYS A 260	-11.601	53.792	23.160	1.00	45.50	AAAA
ATOM	2004	C	LYS A 260	-9.249	56.433	29.441	1.00	40.38	AAAA
ATOM	2005	O	LYS A 260	-9.128	57.547	29.956	1.00	40.79	AAAA
ATOM	2006	N	TYR A 261	-8.749	55.325	29.987	1.00	37.60	AAAA
ATOM	2007	CA	TYR A 261	-7.985	55.342	31.231	1.00	34.25	AAAA
ATOM	2008	CB	TYR A 261	-8.601	54.411	32.266	1.00	34.02	AAAA
ATOM	2009	CG	TYR A 261	-9.894	54.912	32.818	1.00	31.69	AAAA
ATOM	2010	CD1	TYR A 261	-11.093	54.575	32.225	1.00	31.15	AAAA
ATOM	2011	CE1	TYR A 261	-12.274	55.092	32.689	1.00	32.11	AAAA
ATOM	2012	CD2	TYR A 261	-9.912	55.778	33.899	1.00	30.26	AAAA
ATOM	2013	CE2	TYR A 261	-11.082	56.299	34.367	1.00	30.16	AAAA
ATOM	2014	CZ	TYR A 261	-12.261	55.955	33.757	1.00	31.68	AAAA
ATOM	2015	OH	TYR A 261	-13.442	56.491	34.199	1.00	35.56	AAAA
ATOM	2016	C	TYR A 261	-6.559	54.903	30.971	1.00	32.94	AAAA
ATOM	2017	O	TYR A 261	-6.321	53.924	30.278	1.00	31.76	AAAA
ATOM	2018	N	SER A 262	-5.619	55.631	31.552	1.00	32.86	AAAA
ATOM	2019	CA	SER A 262	-4.199	55.360	31.398	1.00	33.59	AAAA
ATOM	2020	CB	SER A 262	-3.413	56.561	31.913	1.00	33.75	AAAA

ATOM	2021	OG	SER A 262	-2.169	56.691	31.258	1.00	35.89	AAAA
ATOM	2022	C	SER A 262	-3.789	54.105	32.162	1.00	35.40	AAAA
ATOM	2023	O	SER A 262	-3.624	54.140	33.389	1.00	35.97	AAAA
ATOM	2024	N	PHE A 263	-3.622	52.997	31.437	1.00	35.97	AAAA
ATOM	2025	CA	PHE A 263	-3.234	51.719	32.044	1.00	34.84	AAAA
ATOM	2026	CB	PHE A 263	-4.341	50.683	31.860	1.00	36.50	AAAA
ATOM	2027	CG	PHE A 263	-3.990	49.316	32.381	1.00	39.61	AAAA
ATOM	2028	CD1	PHE A 263	-4.727	48.201	31.988	1.00	41.67	AAAA
ATOM	2029	CD2	PHE A 263	-2.900	49.128	33.230	1.00	40.53	AAAA
ATOM	2030	CE1	PHE A 263	-4.377	46.918	32.426	1.00	42.35	AAAA
ATOM	2031	CE2	PHE A 263	-2.546	47.859	33.671	1.00	40.74	AAAA
ATOM	2032	CZ	PHE A 263	-3.284	46.753	33.266	1.00	42.13	AAAA
ATOM	2033	C	PHE A 263	-1.949	51.188	31.437	1.00	32.99	AAAA
ATOM	2034	O	PHE A 263	-1.972	50.487	30.433	1.00	31.04	AAAA
ATOM	2035	N	GLY A 264	-0.828	51.506	32.071	1.00	32.29	AAAA
ATOM	2036	CA	GLY A 264	0.451	51.059	31.563	1.00	31.42	AAAA
ATOM	2037	C	GLY A 264	0.788	51.818	30.301	1.00	30.54	AAAA
ATOM	2038	O	GLY A 264	0.727	53.046	30.284	1.00	31.99	AAAA
ATOM	2039	N	ALA A 265	1.150	51.100	29.244	1.00	29.64	AAAA
ATOM	2040	CA	ALA A 265	1.483	51.739	27.973	1.00	29.82	AAAA
ATOM	2041	CB	ALA A 265	2.736	51.117	27.365	1.00	27.80	AAAA
ATOM	2042	C	ALA A 265	0.291	51.522	27.070	1.00	29.67	AAAA
ATOM	2043	O	ALA A 265	0.369	51.672	25.862	1.00	29.33	AAAA
ATOM	2044	N	THR A 266	-0.821	51.192	27.705	1.00	30.73	AAAA
ATOM	2045	CA	THR A 266	-2.070	50.904	27.040	1.00	33.06	AAAA
ATOM	2046	CB	THR A 266	-2.556	49.498	27.439	1.00	34.05	AAAA
ATOM	2047	OG1	THR A 266	-1.733	48.515	26.812	1.00	37.12	AAAA
ATOM	2048	OG2	THR A 266	-4.002	49.281	27.054	1.00	35.94	AAAA
ATOM	2049	C	THR A 266	-3.116	51.880	27.499	1.00	34.62	AAAA
ATOM	2050	O	THR A 266	-3.064	52.355	28.629	1.00	35.05	AAAA
ATOM	2051	N	CYS A 267	-4.073	52.169	26.627	1.00	37.21	AAAA
ATOM	2052	CA	CYS A 267	-5.181	53.050	26.974	1.00	40.21	AAAA
ATOM	2053	C	CYS A 267	-6.394	52.144	27.108	1.00	42.14	AAAA
ATOM	2054	O	CYS A 267	-6.753	51.419	26.177	1.00	43.36	AAAA
ATOM	2055	CB	CYS A 267	-5.403	54.106	25.894	1.00	39.81	AAAA
ATOM	2056	SG	CYS A 267	-4.001	55.258	25.733	1.00	42.58	AAAA
ATOM	2057	N	VAL A 268	-7.029	52.181	28.269	1.00	43.42	AAAA
ATOM	2058	CA	VAL A 268	-8.158	51.303	28.503	1.00	45.29	AAAA
ATOM	2059	CB	VAL A 268	-7.815	50.313	29.629	1.00	45.57	AAAA
ATOM	2060	CG1	VAL A 268	-8.996	49.405	29.909	1.00	47.96	AAAA
ATOM	2061	CG2	VAL A 268	-6.599	49.503	29.237	1.00	45.78	AAAA
ATOM	2062	C	VAL A 268	-9.500	51.950	28.818	1.00	45.76	AAAA
ATOM	2063	O	VAL A 268	-9.586	52.996	29.462	1.00	46.84	AAAA
ATOM	2064	N	LYS A 269	-10.556	51.296	28.363	1.00	45.31	AAAA
ATOM	2065	CA	LYS A 269	-11.893	51.776	28.602	1.00	45.91	AAAA
ATOM	2066	CB	LYS A 269	-12.900	50.830	27.955	1.00	46.72	AAAA
ATOM	2067	CG	LYS A 269	-12.804	49.407	28.472	1.00	49.25	AAAA
ATOM	2068	CD	LYS A 269	-14.191	48.796	28.653	1.00	50.51	AAAA
ATOM	2069	CE	LYS A 269	-14.131	47.549	29.516	1.00	51.49	AAAA
ATOM	2070	NZ	LYS A 269	-13.529	47.829	30.858	1.00	53.11	AAAA
ATOM	2071	C	LYS A 269	-12.127	51.843	30.109	1.00	46.19	AAAA
ATOM	2072	O	LYS A 269	-12.789	52.750	30.603	1.00	46.19	AAAA
ATOM	2073	N	LYS A 270	-11.572	50.882	30.838	1.00	46.37	AAAA
ATOM	2074	CA	LYS A 270	-11.739	50.834	32.283	1.00	46.47	AAAA
ATOM	2075	CB	LYS A 270	-13.061	50.158	32.614	1.00	45.40	AAAA
ATOM	2076	CG	LYS A 270	-14.283	50.889	32.079	1.00	44.63	AAAA
ATOM	2077	CD	LYS A 270	-14.522	52.192	32.827	0.01	44.61	AAAA
ATOM	2078	CE	LYS A 270	-15.751	52.914	32.299	0.01	44.37	AAAA
ATOM	2079	NZ	LYS A 270	-16.981	52.084	32.426	0.01	44.35	AAAA
ATOM	2080	C	LYS A 270	-10.592	50.080	32.947	1.00	47.44	AAAA
ATOM	2081	O	LYS A 270	-10.249	48.982	32.531	1.00	47.54	AAAA
ATOM	2082	N	CYS A 271	-10.014	50.675	33.988	1.00	48.71	AAAA
ATOM	2083	CA	CYS A 271	-8.893	50.085	34.718	1.00	49.28	AAAA
ATOM	2084	C	CYS A 271	-9.162	48.690	35.264	1.00	50.93	AAAA
ATOM	2085	O	CYS A 271	-10.313	48.291	35.459	1.00	51.01	AAAA
ATOM	2086	CB	CYS A 271	-8.488	50.973	35.891	1.00	49.00	AAAA
ATOM	2087	SG	CYS A 271	-7.815	52.614	35.498	1.00	48.06	AAAA
ATOM	2088	N	PRO A 272	-8.083	47.934	35.540	1.00	52.68	AAAA
ATOM	2089	CD	PRO A 272	-6.709	48.295	35.150	1.00	53.08	AAAA
ATOM	2090	CA	PRO A 272	-8.110	46.567	36.073	1.00	53.94	AAAA
ATOM	2091	CB	PRO A 272	-6.644	46.143	36.014	1.00	53.04	AAAA
ATOM	2092	CG	PRO A 272	-6.098	46.946	34.912	1.00	52.41	AAAA
ATOM	2093	C	PRO A 272	-8.649	46.481	37.494	1.00	55.18	AAAA
ATOM	2094	O	PRO A 272	-9.061	47.487	38.079	1.00	55.36	AAAA
ATOM	2095	N	ARG A 273	-8.624	45.268	38.044	1.00	56.95	AAAA

ATOM	2096	CA	ARG	A	273	-9.093	45.014	39.403	1.00	57.68	AAAA
ATOM	2097	CB	ARG	A	273	-9.605	43.572	39.541	1.00	60.30	AAAA
ATOM	2098	CG	ARG	A	273	-10.535	43.080	38.419	1.00	64.49	AAAA
ATOM	2099	CD	ARG	A	273	-11.869	43.838	38.334	1.00	67.04	AAAA
ATOM	2100	NE	ARG	A	273	-12.581	43.521	37.092	1.00	68.77	AAAA
ATOM	2101	CZ	ARG	A	273	-13.682	44.138	36.667	1.00	69.62	AAAA
ATOM	2102	NH1	ARG	A	273	-14.220	45.118	37.385	1.00	70.12	AAAA
ATOM	2103	NH2	ARG	A	273	-14.241	43.784	35.515	1.00	69.16	AAAA
ATOM	2104	C	ARG	A	273	-7.954	45.251	40.403	1.00	57.21	AAAA
ATOM	2105	O	ARG	A	273	-6.774	44.996	40.121	1.00	56.40	AAAA
ATOM	2106	N	ASN	A	274	-8.328	45.746	41.574	1.00	56.21	AAAA
ATOM	2107	CA	ASN	A	274	-7.390	46.051	42.642	1.00	55.41	AAAA
ATOM	2108	CB	ASN	A	274	-6.556	44.830	43.030	1.00	56.70	AAAA
ATOM	2109	CG	ASN	A	274	-5.974	44.953	44.436	1.00	57.44	AAAA
ATOM	2110	OD1	ASN	A	274	-5.153	44.135	44.863	1.00	57.04	AAAA
ATOM	2111	ND2	ASN	A	274	-6.412	45.980	45.167	1.00	57.81	AAAA
ATOM	2112	C	ASN	A	274	-6.461	47.216	42.317	1.00	54.19	AAAA
ATOM	2113	O	ASN	A	274	-5.571	47.535	43.109	1.00	54.98	AAAA
ATOM	2114	N	TYR	A	275	-6.645	47.837	41.152	1.00	51.23	AAAA
ATOM	2115	CA	TYR	A	275	-5.855	49.013	40.799	1.00	47.66	AAAA
ATOM	2116	CB	TYR	A	275	-5.654	49.142	39.287	1.00	47.44	AAAA
ATOM	2117	CG	TYR	A	275	-4.425	48.456	38.758	1.00	46.45	AAAA
ATOM	2118	CD1	TYR	A	275	-4.499	47.191	38.203	1.00	47.32	AAAA
ATOM	2119	CE1	TYR	A	275	-3.361	46.540	37.758	1.00	48.90	AAAA
ATOM	2120	CD2	TYR	A	275	-3.179	49.062	38.853	1.00	46.91	AAAA
ATOM	2121	CE2	TYR	A	275	-2.036	48.425	38.418	1.00	47.84	AAAA
ATOM	2122	CZ	TYR	A	275	-2.128	47.159	37.872	1.00	49.00	AAAA
ATOM	2123	OH	TYR	A	275	-0.986	46.495	37.474	1.00	48.37	AAAA
ATOM	2124	C	TYR	A	275	-6.714	50.168	41.283	1.00	45.62	AAAA
ATOM	2125	O	TYR	A	275	-7.922	50.013	41.451	1.00	44.54	AAAA
ATOM	2126	N	VAL	A	276	-6.111	51.323	41.521	1.00	44.41	AAAA
ATOM	2127	CA	VAL	A	276	-6.903	52.450	41.978	1.00	43.70	AAAA
ATOM	2128	CB	VAL	A	276	-6.212	53.218	43.097	1.00	42.36	AAAA
ATOM	2129	CG1	VAL	A	276	-7.141	54.296	43.609	1.00	42.26	AAAA
ATOM	2130	CG2	VAL	A	276	-5.821	52.276	44.214	1.00	41.19	AAAA
ATOM	2131	C	VAL	A	276	-7.160	53.401	40.826	1.00	43.81	AAAA
ATOM	2132	O	VAL	A	276	-6.242	53.742	40.078	1.00	44.14	AAAA
ATOM	2133	N	VAL	A	277	-8.414	53.822	40.691	1.00	43.47	AAAA
ATOM	2134	CA	VAL	A	277	-8.814	54.732	39.622	1.00	43.47	AAAA
ATOM	2135	CB	VAL	A	277	-10.331	54.620	39.347	1.00	43.09	AAAA
ATOM	2136	CG1	VAL	A	277	-10.623	54.973	37.915	1.00	41.26	AAAA
ATOM	2137	CG2	VAL	A	277	-10.813	53.211	39.654	1.00	43.35	AAAA
ATOM	2138	C	VAL	A	277	-8.458	56.172	39.995	1.00	43.37	AAAA
ATOM	2139	O	VAL	A	277	-8.559	56.572	41.153	1.00	43.56	AAAA
ATOM	2140	N	THR	A	278	-8.057	56.955	39.003	1.00	44.13	AAAA
ATOM	2141	CA	THR	A	278	-7.642	58.337	39.232	1.00	45.21	AAAA
ATOM	2142	CB	THR	A	278	-6.110	58.460	38.963	1.00	44.58	AAAA
ATOM	2143	OG1	THR	A	278	-5.391	57.780	39.996	1.00	43.34	AAAA
ATOM	2144	CG2	THR	A	278	-5.662	59.914	38.901	1.00	44.87	AAAA
ATOM	2145	C	THR	A	278	-8.374	59.410	38.409	1.00	46.02	AAAA
ATOM	2146	O	THR	A	278	-8.515	59.272	37.190	1.00	45.84	AAAA
ATOM	2147	N	ASP	A	279	-8.830	60.472	39.088	1.00	46.74	AAAA
ATOM	2148	CA	ASP	A	279	-9.495	61.612	38.434	1.00	46.81	AAAA
ATOM	2149	CB	ASP	A	279	-9.496	62.852	39.335	1.00	46.45	AAAA
ATOM	2150	CG	ASP	A	279	-10.485	62.757	40.474	1.00	46.49	AAAA
ATOM	2151	OD1	ASP	A	279	-10.352	63.553	41.436	1.00	45.43	AAAA
ATOM	2152	OD2	ASP	A	279	-11.394	61.901	40.400	1.00	46.00	AAAA
ATOM	2153	C	ASP	A	279	-8.679	61.941	37.196	1.00	46.74	AAAA
ATOM	2154	O	ASP	A	279	-7.491	62.237	37.281	1.00	45.31	AAAA
ATOM	2155	N	HIS	A	280	-9.332	61.897	36.048	1.00	49.01	AAAA
ATOM	2156	CA	HIS	A	280	-8.669	62.149	34.780	1.00	50.55	AAAA
ATOM	2157	CB	HIS	A	280	-7.800	63.423	34.874	1.00	53.47	AAAA
ATOM	2158	CG	HIS	A	280	-8.590	64.675	35.140	1.00	54.70	AAAA
ATOM	2159	CD2	HIS	A	280	-9.911	64.947	34.992	1.00	55.44	AAAA
ATOM	2160	ND1	HIS	A	280	-8.021	65.820	35.655	1.00	55.04	AAAA
ATOM	2161	CE1	HIS	A	280	-8.957	66.740	35.819	1.00	55.62	AAAA
ATOM	2162	NE2	HIS	A	280	-10.113	66.235	35.425	1.00	55.09	AAAA
ATOM	2163	C	HIS	A	280	-7.856	60.885	34.450	1.00	49.39	AAAA
ATOM	2164	O	HIS	A	280	-6.623	60.867	34.489	1.00	47.23	AAAA
ATOM	2165	N	GLY	A	281	-8.626	59.831	34.167	1.00	49.17	AAAA
ATOM	2166	CA	GLY	A	281	-8.158	58.500	33.794	1.00	49.41	AAAA
ATOM	2167	C	GLY	A	281	-6.796	57.916	34.117	1.00	48.63	AAAA
ATOM	2168	O	GLY	A	281	-5.896	57.961	33.286	1.00	48.84	AAAA
ATOM	2169	N	SER	A	282	-6.640	57.330	35.300	1.00	47.97	AAAA
ATOM	2170	CA	SER	A	282	-5.365	56.722	35.656	1.00	47.51	AAAA

ATOM	2171	CB	SER A 282	-4.468	57.733	36.361	1.00	46.82	AAAA
ATOM	2172	OG	SER A 282	-3.681	58.448	35.426	1.00	46.53	AAAA
ATOM	2173	C	SER A 282	-5.473	55.472	36.510	1.00	47.75	AAAA
ATOM	2174	O	SER A 282	-6.166	55.447	37.519	1.00	47.51	AAAA
ATOM	2175	N	CYS A 283	-4.772	54.430	36.089	1.00	49.15	AAAA
ATOM	2176	CA	CYS A 283	-4.754	53.171	36.814	1.00	50.45	AAAA
ATOM	2177	C	CYS A 283	-3.417	53.123	37.556	1.00	51.60	AAAA
ATOM	2178	O	CYS A 283	-2.359	53.056	36.926	1.00	51.15	AAAA
ATOM	2179	CB	CYS A 283	-4.852	52.009	35.830	1.00	50.98	AAAA
ATOM	2180	SG	CYS A 283	-6.095	52.210	34.510	1.00	50.02	AAAA
ATOM	2181	N	VAL A 284	-3.466	53.161	38.888	1.00	53.40	AAAA
ATOM	2182	CA	VAL A 284	-2.248	53.164	39.701	1.00	54.56	AAAA
ATOM	2183	CB	VAL A 284	-2.111	54.511	40.465	1.00	53.55	AAAA
ATOM	2184	CG1	VAL A 284	-0.786	54.564	41.201	0.01	54.44	AAAA
ATOM	2185	CG2	VAL A 284	-2.223	55.676	39.492	0.01	54.43	AAAA
ATOM	2186	C	VAL A 284	-2.168	52.012	40.708	1.00	55.82	AAAA
ATOM	2187	O	VAL A 284	-3.197	51.480	41.129	1.00	54.87	AAAA
ATOM	2188	N	ARG A 285	-0.934	51.636	41.068	1.00	56.92	AAAA
ATOM	2189	CA	ARG A 285	-0.650	50.567	42.034	1.00	58.28	AAAA
ATOM	2190	CB	ARG A 285	0.731	49.955	41.800	1.00	56.00	AAAA
ATOM	2191	CG	ARG A 285	0.892	49.146	40.540	1.00	54.36	AAAA
ATOM	2192	CD	ARG A 285	2.294	48.552	40.492	1.00	54.19	AAAA
ATOM	2193	NE	ARG A 285	2.543	47.733	39.308	1.00	54.24	AAAA
ATOM	2194	CZ	ARG A 285	1.737	46.763	38.881	1.00	54.72	AAAA
ATOM	2195	NH1	ARG A 285	0.614	46.481	39.531	1.00	54.28	AAAA
ATOM	2196	NH2	ARG A 285	2.067	46.055	37.813	1.00	54.90	AAAA
ATOM	2197	C	ARG A 285	-0.653	51.167	43.426	1.00	60.13	AAAA
ATOM	2198	O	ARG A 285	-1.372	50.717	44.316	1.00	60.34	AAAA
ATOM	2199	N	ALA A 286	0.189	52.176	43.606	1.00	63.23	AAAA
ATOM	2200	CA	ALA A 286	0.290	52.878	44.880	1.00	68.59	AAAA
ATOM	2201	CB	ALA A 286	1.720	52.797	45.419	1.00	68.77	AAAA
ATOM	2202	C	ALA A 286	-0.113	54.332	44.635	1.00	71.05	AAAA
ATOM	2203	O	ALA A 286	0.424	54.991	43.743	1.00	72.22	AAAA
ATOM	2204	N	CYS A 287	-1.055	54.827	45.429	1.00	73.52	AAAA
ATOM	2205	CA	CYS A 287	-1.549	56.187	45.269	1.00	76.95	AAAA
ATOM	2206	C	CYS A 287	-0.560	57.310	45.597	1.00	78.25	AAAA
ATOM	2207	O	CYS A 287	0.518	57.073	46.141	1.00	78.83	AAAA
ATOM	2208	CB	CYS A 287	-2.811	56.365	46.098	1.00	77.88	AAAA
ATOM	2209	SG	CYS A 287	-3.685	57.910	45.731	1.00	79.03	AAAA
ATOM	2210	N	GLY A 288	-0.947	58.540	45.262	1.00	79.82	AAAA
ATOM	2211	CA	GLY A 288	-0.097	59.694	45.503	1.00	82.39	AAAA
ATOM	2212	C	GLY A 288	-0.110	60.207	46.932	1.00	84.46	AAAA
ATOM	2213	O	GLY A 288	-1.039	59.924	47.693	1.00	84.48	AAAA
ATOM	2214	N	ALA A 289	0.925	60.968	47.291	1.00	85.18	AAAA
ATOM	2215	CA	ALA A 289	1.065	61.530	48.633	1.00	86.18	AAAA
ATOM	2216	CB	ALA A 289	2.120	62.626	48.632	1.00	87.20	AAAA
ATOM	2217	C	ALA A 289	-0.257	62.079	49.145	1.00	86.14	AAAA
ATOM	2218	O	ALA A 289	-1.015	61.372	49.803	1.00	86.92	AAAA
ATOM	2219	N	ALA A 290	-0.528	63.344	48.853	1.00	86.09	AAAA
ATOM	2220	CA	ALA A 290	-1.777	63.953	49.280	1.00	86.07	AAAA
ATOM	2221	CB	ALA A 290	-1.847	65.397	48.803	1.00	85.73	AAAA
ATOM	2222	C	ALA A 290	-2.913	63.141	48.672	1.00	86.13	AAAA
ATOM	2223	O	ALA A 290	-3.455	63.507	47.632	1.00	86.13	AAAA
ATOM	2224	N	SER A 291	-3.255	62.032	49.322	1.00	86.73	AAAA
ATOM	2225	CA	SER A 291	-4.320	61.154	48.855	1.00	87.25	AAAA
ATOM	2226	CB	SER A 291	-3.998	60.644	47.452	1.00	86.99	AAAA
ATOM	2227	OG	SER A 291	-4.113	61.681	46.494	1.00	86.76	AAAA
ATOM	2228	C	SER A 291	-4.578	59.963	49.779	1.00	87.61	AAAA
ATOM	2229	O	SER A 291	-3.688	59.518	50.503	1.00	87.65	AAAA
ATOM	2230	N	ALA A 292	-5.814	59.466	49.741	1.00	88.23	AAAA
ATOM	2231	CA	ALA A 292	-6.253	58.319	50.537	1.00	88.65	AAAA
ATOM	2232	CB	ALA A 292	-6.973	58.785	51.795	1.00	88.86	AAAA
ATOM	2233	C	ALA A 292	-7.200	57.493	49.677	1.00	88.78	AAAA
ATOM	2234	O	ALA A 292	-7.769	58.005	48.718	1.00	88.88	AAAA
ATOM	2235	N	SER A 293	-7.385	56.224	50.024	1.00	89.46	AAAA
ATOM	2236	CA	SER A 293	-8.256	55.355	49.242	1.00	90.15	AAAA
ATOM	2237	CB	SER A 293	-7.455	54.151	48.740	1.00	90.43	AAAA
ATOM	2238	OG	SER A 293	-6.789	53.500	49.806	1.00	91.33	AAAA
ATOM	2239	C	SER A 293	-9.513	54.874	49.969	1.00	90.20	AAAA
ATOM	2240	O	SER A 293	-9.489	54.616	51.170	1.00	89.99	AAAA
ATOM	2241	N	ALA A 294	-10.605	54.761	49.215	1.00	90.39	AAAA
ATOM	2242	CA	ALA A 294	-11.896	54.307	49.729	1.00	90.77	AAAA
ATOM	2243	CB	ALA A 294	-12.815	55.505	49.951	1.00	89.05	AAAA
ATOM	2244	C	ALA A 294	-12.520	53.332	48.718	1.00	91.77	AAAA
ATOM	2245	O	ALA A 294	-12.136	53.318	47.551	1.00	91.79	AAAA

ATOM	2246	N	ALA A 295	-13.472	52.514	49.163	1.00	93.22	AAAA
ATOM	2247	CA	ALA A 295	-14.132	51.546	48.280	1.00	93.92	AAAA
ATOM	2248	CB	ALA A 295	-13.388	50.215	48.308	1.00	93.68	AAAA
ATOM	2249	C	ALA A 295	-15.588	51.336	48.694	1.00	94.42	AAAA
ATOM	2250	O	ALA A 295	-16.161	52.168	49.398	1.00	94.76	AAAA
ATOM	2251	N	ALA A 296	-16.184	50.229	48.251	1.00	94.58	AAAA
ATOM	2252	CA	ALA A 296	-17.573	49.910	48.588	1.00	94.29	AAAA
ATOM	2253	CB	ALA A 296	-18.529	50.740	47.739	1.00	94.51	AAAA
ATOM	2254	C	ALA A 296	-17.856	48.427	48.390	1.00	94.06	AAAA
ATOM	2255	O	ALA A 296	-17.526	47.605	49.246	1.00	93.89	AAAA
ATOM	2256	N	GLY A 298	-18.307	50.902	44.075	1.00	92.42	AAAA
ATOM	2257	CA	GLY A 298	-17.990	49.544	43.666	1.00	92.62	AAAA
ATOM	2258	C	GLY A 298	-16.506	49.350	43.423	1.00	92.55	AAAA
ATOM	2259	O	GLY A 298	-15.930	48.328	43.801	1.00	92.47	AAAA
ATOM	2260	N	ALA A 299	-15.886	50.337	42.784	1.00	92.24	AAAA
ATOM	2261	CA	ALA A 299	-14.460	50.285	42.490	1.00	91.80	AAAA
ATOM	2262	CB	ALA A 299	-14.170	51.001	41.169	1.00	91.38	AAAA
ATOM	2263	C	ALA A 299	-13.660	50.927	43.625	1.00	91.37	AAAA
ATOM	2264	O	ALA A 299	-14.223	51.384	44.621	1.00	91.52	AAAA
ATOM	2265	N	ALA A 300	-12.342	50.948	43.471	1.00	90.47	AAAA
ATOM	2266	CA	ALA A 300	-11.468	51.540	44.470	1.00	88.67	AAAA
ATOM	2267	CB	ALA A 300	-10.360	50.566	44.838	1.00	88.66	AAAA
ATOM	2268	C	ALA A 300	-10.879	52.825	43.904	1.00	87.65	AAAA
ATOM	2269	O	ALA A 300	-10.211	52.817	42.870	1.00	87.30	AAAA
ATOM	2270	N	ALA A 301	-11.145	53.931	44.583	1.00	86.76	AAAA
ATOM	2271	CA	ALA A 301	-10.648	55.226	44.150	1.00	86.51	AAAA
ATOM	2272	CB	ALA A 301	-11.819	56.151	43.837	1.00	86.86	AAAA
ATOM	2273	C	ALA A 301	-9.768	55.842	45.229	1.00	86.08	AAAA
ATOM	2274	O	ALA A 301	-9.877	55.498	46.403	1.00	85.53	AAAA
ATOM	2275	N	CYS A 302	-8.892	56.753	44.826	1.00	85.34	AAAA
ATOM	2276	CA	CYS A 302	-8.011	57.406	45.772	1.00	84.99	AAAA
ATOM	2277	C	CYS A 302	-8.138	58.917	45.650	1.00	85.77	AAAA
ATOM	2278	O	CYS A 302	-7.741	59.494	44.641	1.00	86.77	AAAA
ATOM	2279	CB	CYS A 302	-6.567	56.974	45.530	1.00	83.75	AAAA
ATOM	2280	SG	CYS A 302	-5.427	57.705	46.740	1.00	82.11	AAAA
ATOM	2281	N	SER A 303	-8.687	59.550	46.686	1.00	86.13	AAAA
ATOM	2282	CA	SER A 303	-8.896	60.997	46.697	1.00	87.21	AAAA
ATOM	2283	CB	SER A 303	-10.242	61.317	47.351	1.00	87.49	AAAA
ATOM	2284	OG	SER A 303	-11.312	60.738	46.619	1.00	87.38	AAAA
ATOM	2285	C	SER A 303	-7.788	61.814	47.366	1.00	87.79	AAAA
ATOM	2286	O	SER A 303	-6.608	61.544	47.159	1.00	87.82	AAAA
ATOM	2287	N	ALA A 304	-8.169	62.811	48.168	1.00	88.00	AAAA
ATOM	2288	CA	ALA A 304	-7.199	63.687	48.834	1.00	87.92	AAAA
ATOM	2289	CB	ALA A 304	-7.571	65.155	48.570	1.00	87.01	AAAA
ATOM	2290	C	ALA A 304	-6.968	63.471	50.342	1.00	88.23	AAAA
ATOM	2291	O	ALA A 304	-7.888	63.568	51.162	1.00	89.06	AAAA
ATOM	2292	N	CYS A 305	-5.711	63.195	50.687	1.00	87.62	AAAA
ATOM	2293	CA	CYS A 305	-5.282	62.973	52.066	1.00	86.43	AAAA
ATOM	2294	C	CYS A 305	-3.772	63.182	52.108	1.00	85.77	AAAA
ATOM	2295	O	CYS A 305	-3.003	62.248	51.892	1.00	85.59	AAAA
ATOM	2296	CB	CYS A 305	-5.608	61.547	52.508	1.00	85.38	AAAA
ATOM	2297	SG	CYS A 305	-5.278	61.135	54.260	1.00	88.81	AAAA
ATOM	2298	N	CYS A 309	0.128	61.875	54.993	1.00	82.16	AAAA
ATOM	2299	CA	CYS A 309	-1.192	62.106	55.563	1.00	80.18	AAAA
ATOM	2300	C	CYS A 309	-1.348	61.201	56.777	1.00	79.05	AAAA
ATOM	2301	O	CYS A 309	-1.682	61.658	57.873	1.00	79.12	AAAA
ATOM	2302	CB	CYS A 309	-2.280	61.795	54.527	1.00	83.74	AAAA
ATOM	2303	SG	CYS A 309	-3.925	62.516	54.893	1.00	86.52	AAAA
ATOM	2304	N	ALA A 310	-1.107	59.911	56.569	1.00	77.19	AAAA
ATOM	2305	CA	ALA A 310	-1.193	58.927	57.639	1.00	74.81	AAAA
ATOM	2306	CB	ALA A 310	-2.102	57.786	57.233	1.00	75.18	AAAA
ATOM	2307	C	ALA A 310	0.223	58.423	57.883	1.00	73.24	AAAA
ATOM	2308	O	ALA A 310	0.736	58.516	58.998	1.00	74.31	AAAA
ATOM	2309	N	ALA A 311	0.850	57.904	56.831	1.00	70.33	AAAA
ATOM	2310	CA	ALA A 311	2.225	57.409	56.904	1.00	67.51	AAAA
ATOM	2311	CB	ALA A 311	2.507	56.769	58.263	1.00	67.02	AAAA
ATOM	2312	C	ALA A 311	2.530	56.415	55.790	1.00	65.87	AAAA
ATOM	2313	O	ALA A 311	2.277	55.213	55.919	1.00	66.24	AAAA
ATOM	2314	N	VAL A 312	3.070	56.935	54.693	1.00	63.07	AAAA
ATOM	2315	CA	VAL A 312	3.438	56.122	53.547	1.00	60.35	AAAA
ATOM	2316	CB	VAL A 312	2.844	56.691	52.248	1.00	59.91	AAAA
ATOM	2317	CG1	VAL A 312	3.455	56.006	51.041	1.00	59.90	AAAA
ATOM	2318	CG2	VAL A 312	1.347	56.501	52.253	1.00	60.52	AAAA
ATOM	2319	C	VAL A 312	4.955	56.119	53.449	1.00	58.75	AAAA
ATOM	2320	O	VAL A 312	5.597	57.166	53.540	1.00	57.85	AAAA

ATOM	2321	N	CYS	A	313	5.520	54.929	53.280	1.00	56.65	AAAA
ATOM	2322	CA	CYS	A	313	6.959	54.777	53.173	1.00	54.03	AAAA
ATOM	2323	C	CYS	A	313	7.274	53.843	52.017	1.00	53.18	AAAA
ATOM	2324	O	CYS	A	313	6.577	52.859	51.798	1.00	52.61	AAAA
ATOM	2325	CB	CYS	A	313	7.539	54.194	54.472	1.00	53.97	AAAA
ATOM	2326	SG	CYS	A	313	7.198	55.154	55.984	1.00	52.70	AAAA
ATOM	2327	N	ASN	A	314	8.328	54.161	51.277	1.00	53.19	AAAA
ATOM	2328	CA	ASN	A	314	8.745	53.340	50.153	1.00	52.45	AAAA
ATOM	2329	CB	ASN	A	314	10.145	53.755	49.676	1.00	53.27	AAAA
ATOM	2330	CG	ASN	A	314	10.145	55.047	48.875	1.00	53.72	AAAA
ATOM	2331	OD1	ASN	A	314	9.384	55.189	47.917	1.00	53.63	AAAA
ATOM	2332	ND2	ASN	A	314	11.016	55.988	49.251	1.00	51.95	AAAA
ATOM	2333	C	ASN	A	314	8.794	51.878	50.574	1.00	51.98	AAAA
ATOM	2334	O	ASN	A	314	9.110	51.569	51.716	1.00	52.48	AAAA
ATOM	2335	N	GLY	A	315	8.472	50.982	49.653	1.00	50.49	AAAA
ATOM	2336	CA	GLY	A	315	8.545	49.566	49.953	1.00	49.28	AAAA
ATOM	2337	C	GLY	A	315	9.983	49.170	49.692	1.00	48.34	AAAA
ATOM	2338	O	GLY	A	315	10.871	49.992	49.856	1.00	47.88	AAAA
ATOM	2339	N	ILE	A	316	10.231	47.934	49.282	1.00	48.48	AAAA
ATOM	2340	CA	ILE	A	316	11.602	47.524	49.008	1.00	49.65	AAAA
ATOM	2341	CB	ILE	A	316	11.996	46.248	49.801	1.00	48.77	AAAA
ATOM	2342	CG2	ILE	A	316	13.404	45.794	49.408	1.00	47.91	AAAA
ATOM	2343	CG1	ILE	A	316	11.965	46.542	51.299	1.00	48.94	AAAA
ATOM	2344	CD1	ILE	A	316	12.522	45.430	52.154	1.00	48.99	AAAA
ATOM	2345	C	ILE	A	316	11.859	47.270	47.527	1.00	50.50	AAAA
ATOM	2346	O	ILE	A	316	11.010	46.726	46.817	1.00	52.02	AAAA
ATOM	2347	N	GLY	A	317	13.037	47.677	47.068	1.00	50.62	AAAA
ATOM	2348	CA	GLY	A	317	13.411	47.463	45.681	1.00	50.71	AAAA
ATOM	2349	C	GLY	A	317	12.831	48.433	44.671	1.00	50.75	AAAA
ATOM	2350	O	GLY	A	317	13.347	48.564	43.559	1.00	49.11	AAAA
ATOM	2351	N	ILE	A	318	11.761	49.119	45.055	1.00	51.87	AAAA
ATOM	2352	CA	ILE	A	318	11.109	50.060	44.159	1.00	51.98	AAAA
ATOM	2353	CB	ILE	A	318	9.907	49.389	43.428	1.00	51.42	AAAA
ATOM	2354	CG2	ILE	A	318	8.955	48.768	44.442	0.01	51.57	AAAA
ATOM	2355	CG1	ILE	A	318	9.190	50.415	42.545	0.01	51.51	AAAA
ATOM	2356	CD1	ILE	A	318	8.030	49.846	41.754	0.01	51.32	AAAA
ATOM	2357	C	ILE	A	318	10.633	51.318	44.875	1.00	52.30	AAAA
ATOM	2358	O	ILE	A	318	9.498	51.390	45.345	1.00	51.85	AAAA
ATOM	2359	N	GLY	A	319	11.509	52.314	44.951	1.00	52.78	AAAA
ATOM	2360	CA	GLY	A	319	11.129	53.554	45.595	1.00	52.93	AAAA
ATOM	2361	C	GLY	A	319	12.304	54.400	46.032	1.00	53.04	AAAA
ATOM	2362	O	GLY	A	319	12.169	55.617	46.170	1.00	53.27	AAAA
ATOM	2363	N	GLU	A	320	13.449	53.756	46.252	1.00	52.45	AAAA
ATOM	2364	CA	GLU	A	320	14.667	54.437	46.686	1.00	51.24	AAAA
ATOM	2365	CB	GLU	A	320	14.307	55.611	47.610	1.00	51.15	AAAA
ATOM	2366	CG	GLU	A	320	15.293	55.934	48.692	1.00	52.94	AAAA
ATOM	2367	CD	GLU	A	320	15.041	55.115	49.938	1.00	54.57	AAAA
ATOM	2368	OE1	GLU	A	320	13.950	55.283	50.537	1.00	54.59	AAAA
ATOM	2369	OE2	GLU	A	320	15.925	54.308	50.311	1.00	54.31	AAAA
ATOM	2370	C	GLU	A	320	15.613	53.446	47.369	1.00	50.93	AAAA
ATOM	2371	O	GLU	A	320	16.640	53.819	47.938	1.00	50.83	AAAA
ATOM	2372	N	PHE	A	321	15.262	52.166	47.297	1.00	50.07	AAAA
ATOM	2373	CA	PHE	A	321	16.089	51.123	47.882	1.00	47.73	AAAA
ATOM	2374	CB	PHE	A	321	15.285	50.297	48.875	1.00	45.73	AAAA
ATOM	2375	CG	PHE	A	321	14.766	51.090	50.039	1.00	45.14	AAAA
ATOM	2376	CD1	PHE	A	321	13.578	51.804	49.937	1.00	44.23	AAAA
ATOM	2377	CD2	PHE	A	321	15.454	51.104	51.247	1.00	44.17	AAAA
ATOM	2378	CE1	PHE	A	321	13.085	52.509	51.018	1.00	44.34	AAAA
ATOM	2379	CE2	PHE	A	321	14.967	51.808	52.332	1.00	43.49	AAAA
ATOM	2380	CZ	PHE	A	321	13.782	52.510	52.220	1.00	44.28	AAAA
ATOM	2381	C	PHE	A	321	16.580	50.245	46.749	1.00	47.46	AAAA
ATOM	2382	O	PHE	A	321	17.695	49.707	46.782	1.00	47.78	AAAA
ATOM	2383	N	LYS	A	322	15.735	50.130	45.732	1.00	46.08	AAAA
ATOM	2384	CA	LYS	A	322	16.051	49.339	44.556	1.00	45.59	AAAA
ATOM	2385	CB	LYS	A	322	16.611	50.246	43.455	1.00	46.82	AAAA
ATOM	2386	CG	LYS	A	322	16.954	49.525	42.162	0.01	46.39	AAAA
ATOM	2387	CD	LYS	A	322	17.503	50.490	41.124	0.01	46.46	AAAA
ATOM	2388	CE	LYS	A	322	17.847	49.774	39.829	0.01	46.34	AAAA
ATOM	2389	NZ	LYS	A	322	18.883	48.725	40.037	0.01	46.38	AAAA
ATOM	2390	C	LYS	A	322	17.035	48.213	44.849	1.00	43.91	AAAA
ATOM	2391	O	LYS	A	322	16.637	47.096	45.167	1.00	44.41	AAAA
ATOM	2392	N	ASP	A	323	18.322	48.508	44.751	1.00	42.18	AAAA
ATOM	2393	CA	ASP	A	323	19.325	47.493	44.994	1.00	41.93	AAAA
ATOM	2394	CB	ASP	A	323	20.685	47.977	44.493	1.00	42.94	AAAA
ATOM	2395	CG	ASP	A	323	20.720	48.147	42.988	0.01	42.36	AAAA

ATOM	2396	OD1	ASP	A	323	20.640	47.128	42.271	0.01	42.40	AAAA
ATOM	2397	OD2	ASP	A	323	20.818	49.300	42.521	0.01	42.36	AAAA
ATOM	2398	C	ASP	A	323	19.389	47.117	46.463	1.00	41.03	AAAA
ATOM	2399	O	ASP	A	323	20.463	46.869	47.009	1.00	42.19	AAAA
ATOM	2400	N	SER	A	324	18.220	47.072	47.094	1.00	39.41	AAAA
ATOM	2401	CA	SER	A	324	18.095	46.711	48.504	1.00	37.10	AAAA
ATOM	2402	CB	SER	A	324	17.260	47.756	49.248	1.00	37.83	AAAA
ATOM	2403	OG	SER	A	324	17.870	49.030	49.213	1.00	38.03	AAAA
ATOM	2404	C	SER	A	324	17.418	45.348	48.636	1.00	35.39	AAAA
ATOM	2405	O	SER	A	324	16.188	45.242	48.537	1.00	34.24	AAAA
ATOM	2406	N	LEU	A	325	18.220	44.315	48.886	1.00	33.17	AAAA
ATOM	2407	CA	LEU	A	325	17.697	42.962	49.009	1.00	31.03	AAAA
ATOM	2408	CB	LEU	A	325	18.835	41.935	48.969	1.00	29.74	AAAA
ATOM	2409	CG	LEU	A	325	19.256	41.553	47.546	1.00	30.33	AAAA
ATOM	2410	CD1	LEU	A	325	20.174	42.617	46.971	1.00	32.29	AAAA
ATOM	2411	CD2	LEU	A	325	19.957	40.231	47.557	1.00	30.55	AAAA
ATOM	2412	C	LEU	A	325	16.811	42.663	50.202	1.00	29.18	AAAA
ATOM	2413	O	LEU	A	325	16.126	41.646	50.206	1.00	30.85	AAAA
ATOM	2414	N	SER	A	326	16.781	43.534	51.201	1.00	26.79	AAAA
ATOM	2415	CA	SER	A	326	15.964	43.230	52.368	1.00	26.21	AAAA
ATOM	2416	CB	SER	A	326	16.536	41.976	53.047	1.00	22.34	AAAA
ATOM	2417	OG	SER	A	326	15.992	41.768	54.326	1.00	15.09	AAAA
ATOM	2418	C	SER	A	326	15.848	44.353	53.387	1.00	27.74	AAAA
ATOM	2419	O	SER	A	326	16.495	45.391	53.251	1.00	28.20	AAAA
ATOM	2420	N	ILE	A	327	14.993	44.148	54.391	1.00	29.40	AAAA
ATOM	2421	CA	ILE	A	327	14.830	45.116	55.461	1.00	31.14	AAAA
ATOM	2422	CB	ILE	A	327	13.837	44.626	56.545	1.00	31.16	AAAA
ATOM	2423	CG2	ILE	A	327	14.041	45.391	57.838	1.00	34.07	AAAA
ATOM	2424	CG1	ILE	A	327	12.397	44.847	56.075	1.00	31.46	AAAA
ATOM	2425	CD1	ILE	A	327	12.059	46.289	55.718	1.00	29.11	AAAA
ATOM	2426	C	ILE	A	327	16.245	45.171	55.998	1.00	32.90	AAAA
ATOM	2427	O	ILE	A	327	16.862	44.132	56.258	1.00	30.25	AAAA
ATOM	2428	N	ASN	A	328	16.759	46.388	56.148	1.00	36.73	AAAA
ATOM	2429	CA	ASN	A	328	18.142	46.572	56.562	1.00	39.78	AAAA
ATOM	2430	CB	ASN	A	328	18.887	47.328	55.472	1.00	41.31	AAAA
ATOM	2431	CG	ASN	A	328	20.178	46.670	55.123	1.00	41.86	AAAA
ATOM	2432	OD1	ASN	A	328	20.988	46.404	55.998	1.00	43.06	AAAA
ATOM	2433	ND2	ASN	A	328	20.367	46.389	53.842	1.00	41.32	AAAA
ATOM	2434	C	ASN	A	328	18.492	47.209	57.888	1.00	40.89	AAAA
ATOM	2435	O	ASN	A	328	17.839	48.145	58.350	1.00	40.12	AAAA
ATOM	2436	N	ALA	A	329	19.581	46.692	58.453	1.00	42.61	AAAA
ATOM	2437	CA	ALA	A	329	20.127	47.130	59.730	1.00	44.69	AAAA
ATOM	2438	CB	ALA	A	329	21.269	46.221	60.133	1.00	45.55	AAAA
ATOM	2439	C	ALA	A	329	20.625	48.557	59.674	1.00	45.26	AAAA
ATOM	2440	O	ALA	A	329	21.672	48.825	59.097	1.00	44.81	AAAA
ATOM	2441	N	THR	A	330	19.881	49.462	60.298	1.00	46.67	AAAA
ATOM	2442	CA	THR	A	330	20.262	50.860	60.312	1.00	48.07	AAAA
ATOM	2443	CB	THR	A	330	21.509	51.086	61.203	1.00	48.18	AAAA
ATOM	2444	OG1	THR	A	330	21.249	50.595	62.524	0.01	48.02	AAAA
ATOM	2445	CG2	THR	A	330	21.849	52.568	61.281	0.01	48.03	AAAA
ATOM	2446	C	THR	A	330	20.573	51.248	58.868	1.00	49.13	AAAA
ATOM	2447	O	THR	A	330	21.690	51.654	58.529	1.00	49.74	AAAA
ATOM	2448	N	ASN	A	331	19.566	51.094	58.019	1.00	49.19	AAAA
ATOM	2449	CA	ASN	A	331	19.676	51.417	56.610	1.00	49.37	AAAA
ATOM	2450	CB	ASN	A	331	20.489	50.352	55.903	1.00	48.91	AAAA
ATOM	2451	CG	ASN	A	331	21.958	50.488	56.175	1.00	49.77	AAAA
ATOM	2452	OD1	ASN	A	331	22.610	51.377	55.641	1.00	49.32	AAAA
ATOM	2453	ND2	ASN	A	331	22.490	49.619	57.023	1.00	50.02	AAAA
ATOM	2454	C	ASN	A	331	18.275	51.471	56.043	1.00	50.07	AAAA
ATOM	2455	O	ASN	A	331	17.777	52.530	55.667	1.00	50.99	AAAA
ATOM	2456	N	ALA	A	332	17.624	50.324	55.981	1.00	49.98	AAAA
ATOM	2457	CA	ALA	A	332	16.274	50.323	55.477	1.00	49.02	AAAA
ATOM	2458	CB	ALA	A	332	15.816	48.902	55.179	1.00	48.69	AAAA
ATOM	2459	C	ALA	A	332	15.425	50.951	56.573	1.00	48.34	AAAA
ATOM	2460	O	ALA	A	332	14.406	51.561	56.283	1.00	49.27	AAAA
ATOM	2461	N	LYS	A	333	15.868	50.828	57.825	1.00	47.00	AAAA
ATOM	2462	CA	LYS	A	333	15.134	51.372	58.973	1.00	46.67	AAAA
ATOM	2463	CB	LYS	A	333	15.898	51.092	60.265	1.00	45.61	AAAA
ATOM	2464	CG	LYS	A	333	16.500	49.711	60.342	1.00	46.01	AAAA
ATOM	2465	CD	LYS	A	333	15.528	48.609	59.961	1.00	45.97	AAAA
ATOM	2466	CE	LYS	A	333	14.313	48.571	60.860	1.00	45.53	AAAA
ATOM	2467	NZ	LYS	A	333	13.437	49.741	60.609	1.00	46.06	AAAA
ATOM	2468	C	LYS	A	333	14.786	52.871	58.894	1.00	47.11	AAAA
ATOM	2469	O	LYS	A	333	14.929	53.631	59.862	1.00	45.93	AAAA
ATOM	2470	N	HIS	A	334	14.331	53.283	57.721	1.00	47.34	AAAA

ATOM	2471	CA	HIS	A	334	13.909	54.647	57.477	1.00	47.23	AAAA
ATOM	2472	CB	HIS	A	334	13.988	54.943	55.967	1.00	48.34	AAAA
ATOM	2473	CG	HIS	A	334	13.991	56.403	55.612	1.00	50.17	AAAA
ATOM	2474	CD2	HIS	A	334	12.975	57.264	55.355	1.00	50.74	AAAA
ATOM	2475	ND1	HIS	A	334	15.153	57.117	55.406	1.00	50.99	AAAA
ATOM	2476	CE1	HIS	A	334	14.854	58.349	55.031	1.00	50.42	AAAA
ATOM	2477	NE2	HIS	A	334	13.539	58.464	54.991	1.00	51.06	AAAA
ATOM	2478	C	HIS	A	334	12.449	54.591	57.956	1.00	46.12	AAAA
ATOM	2479	O	HIS	A	334	11.937	55.539	58.536	1.00	46.22	AAAA
ATOM	2480	N	PHE	A	335	11.807	53.445	57.733	1.00	44.86	AAAA
ATOM	2481	CA	PHE	A	335	10.414	53.230	58.113	1.00	44.82	AAAA
ATOM	2482	CB	PHE	A	335	10.046	51.738	58.082	1.00	41.96	AAAA
ATOM	2483	CG	PHE	A	335	10.470	51.009	56.834	1.00	38.99	AAAA
ATOM	2484	CD1	PHE	A	335	11.773	50.555	56.683	1.00	37.04	AAAA
ATOM	2485	CD2	PHE	A	335	9.560	50.741	55.824	1.00	38.75	AAAA
ATOM	2486	CE1	PHE	A	335	12.160	49.840	55.544	1.00	35.29	AAAA
ATOM	2487	CE2	PHE	A	335	9.947	50.024	54.679	1.00	38.62	AAAA
ATOM	2488	CZ	PHE	A	335	11.247	49.575	54.545	1.00	35.29	AAAA
ATOM	2489	C	PHE	A	335	10.128	53.749	59.516	1.00	47.07	AAAA
ATOM	2490	O	PHE	A	335	10.105	52.977	60.472	1.00	48.59	AAAA
ATOM	2491	N	LYS	A	336	9.899	55.050	59.641	1.00	48.94	AAAA
ATOM	2492	CA	LYS	A	336	9.619	55.659	60.937	1.00	49.82	AAAA
ATOM	2493	CB	LYS	A	336	9.403	57.168	60.778	1.00	51.03	AAAA
ATOM	2494	CG	LYS	A	336	10.603	57.915	60.220	0.01	50.18	AAAA
ATOM	2495	CD	LYS	A	336	10.319	59.406	60.116	0.01	49.94	AAAA
ATOM	2496	CE	LYS	A	336	11.518	60.162	59.566	0.01	49.59	AAAA
ATOM	2497	NZ	LYS	A	336	11.255	61.624	59.467	0.01	49.48	AAAA
ATOM	2498	C	LYS	A	336	8.391	55.034	61.567	1.00	50.01	AAAA
ATOM	2499	O	LYS	A	336	8.436	53.915	62.039	1.00	50.30	AAAA
ATOM	2500	N	ASN	A	337	7.292	55.766	61.582	1.00	51.95	AAAA
ATOM	2501	CA	ASN	A	337	6.065	55.251	62.165	1.00	54.58	AAAA
ATOM	2502	CB	ASN	A	337	5.367	56.338	63.002	1.00	60.00	AAAA
ATOM	2503	CG	ASN	A	337	6.267	56.930	64.085	1.00	65.33	AAAA
ATOM	2504	OD1	ASN	A	337	7.354	57.423	63.789	1.00	65.46	AAAA
ATOM	2505	ND2	ASN	A	337	5.815	56.906	65.336	1.00	70.95	AAAA
ATOM	2506	C	ASN	A	337	5.149	54.822	61.024	1.00	53.14	AAAA
ATOM	2507	O	ASN	A	337	3.925	54.903	61.130	1.00	53.44	AAAA
ATOM	2508	N	CYS	A	338	5.744	54.366	59.929	1.00	50.64	AAAA
ATOM	2509	CA	CYS	A	338	4.964	53.948	58.775	1.00	48.22	AAAA
ATOM	2510	C	CYS	A	338	3.748	53.141	59.190	1.00	46.34	AAAA
ATOM	2511	O	CYS	A	338	3.841	52.236	60.010	1.00	44.39	AAAA
ATOM	2512	CB	CYS	A	338	5.827	53.123	57.825	1.00	49.28	AAAA
ATOM	2513	SG	CYS	A	338	7.465	53.851	57.524	1.00	51.94	AAAA
ATOM	2514	N	THR	A	339	2.598	53.488	58.630	1.00	45.15	AAAA
ATOM	2515	CA	THR	A	339	1.369	52.774	58.933	1.00	44.67	AAAA
ATOM	2516	CB	THR	A	339	0.234	53.741	59.299	1.00	45.64	AAAA
ATOM	2517	OG1	THR	A	339	0.167	54.783	58.319	1.00	46.78	AAAA
ATOM	2518	CG2	THR	A	339	0.466	54.330	60.685	1.00	45.17	AAAA
ATOM	2519	C	THR	A	339	0.959	51.932	57.725	1.00	43.18	AAAA
ATOM	2520	O	THR	A	339	0.096	51.050	57.814	1.00	43.48	AAAA
ATOM	2521	N	SER	A	340	1.581	52.212	56.590	1.00	40.04	AAAA
ATOM	2522	CA	SER	A	340	1.310	51.448	55.392	1.00	38.11	AAAA
ATOM	2523	CB	SER	A	340	0.076	51.973	54.668	1.00	39.38	AAAA
ATOM	2524	OG	SER	A	340	0.411	53.050	53.817	1.00	40.07	AAAA
ATOM	2525	C	SER	A	340	2.523	51.566	54.499	1.00	36.63	AAAA
ATOM	2526	O	SER	A	340	3.199	52.593	54.476	1.00	36.03	AAAA
ATOM	2527	N	ILE	A	341	2.807	50.507	53.763	1.00	35.59	AAAA
ATOM	2528	CA	ILE	A	341	3.954	50.529	52.888	1.00	34.72	AAAA
ATOM	2529	CB	ILE	A	341	4.945	49.442	53.272	1.00	32.92	AAAA
ATOM	2530	CG2	ILE	A	341	6.127	49.475	52.338	1.00	33.33	AAAA
ATOM	2531	CG1	ILE	A	341	5.410	49.672	54.700	1.00	32.69	AAAA
ATOM	2532	CD1	ILE	A	341	6.466	48.722	55.134	1.00	35.16	AAAA
ATOM	2533	C	ILE	A	341	3.597	50.382	51.420	1.00	34.76	AAAA
ATOM	2534	O	ILE	A	341	3.153	49.322	50.985	1.00	35.81	AAAA
ATOM	2535	N	SER	A	342	3.780	51.463	50.668	1.00	34.03	AAAA
ATOM	2536	CA	SER	A	342	3.517	51.472	49.241	1.00	33.55	AAAA
ATOM	2537	CB	SER	A	342	3.590	52.900	48.705	1.00	33.22	AAAA
ATOM	2538	OG	SER	A	342	2.610	53.717	49.319	1.00	34.53	AAAA
ATOM	2539	C	SER	A	342	4.625	50.633	48.638	1.00	33.68	AAAA
ATOM	2540	O	SER	A	342	5.754	51.099	48.515	1.00	34.43	AAAA
ATOM	2541	N	GLY	A	343	4.304	49.391	48.287	1.00	32.90	AAAA
ATOM	2542	CA	GLY	A	343	5.300	48.493	47.729	1.00	33.28	AAAA
ATOM	2543	C	GLY	A	343	5.371	47.168	48.472	1.00	33.68	AAAA
ATOM	2544	O	GLY	A	343	4.461	46.808	49.214	1.00	33.04	AAAA
ATOM	2545	N	ASP	A	344	6.446	46.420	48.263	1.00	33.58	AAAA

ATOM	2546	CA	ASP	A	344	6.586	45.149	48.943	1.00	33.45	AAAA
ATOM	2547	CB	ASP	A	344	6.799	43.980	47.941	1.00	34.67	AAAA
ATOM	2548	CG	ASP	A	344	7.574	44.374	46.655	1.00	37.89	AAAA
ATOM	2549	OD1	ASP	A	344	8.829	44.328	46.636	1.00	38.53	AAAA
ATOM	2550	OD2	ASP	A	344	6.917	44.708	45.640	1.00	35.87	AAAA
ATOM	2551	C	ASP	A	344	7.699	45.201	49.986	1.00	33.21	AAAA
ATOM	2552	O	ASP	A	344	8.530	46.116	49.978	1.00	34.09	AAAA
ATOM	2553	N	LEU	A	345	7.676	44.241	50.912	1.00	30.83	AAAA
ATOM	2554	CA	LEU	A	345	8.680	44.133	51.969	1.00	27.52	AAAA
ATOM	2555	CB	LEU	A	345	8.052	44.303	53.357	1.00	27.67	AAAA
ATOM	2556	CG	LEU	A	345	7.558	45.650	53.877	1.00	27.29	AAAA
ATOM	2557	CD1	LEU	A	345	6.052	45.633	53.942	1.00	28.27	AAAA
ATOM	2558	CD2	LEU	A	345	8.131	45.912	55.264	1.00	25.73	AAAA
ATOM	2559	C	LEU	A	345	9.328	42.758	51.919	1.00	25.60	AAAA
ATOM	2560	O	LEU	A	345	8.641	41.748	51.791	1.00	24.88	AAAA
ATOM	2561	N	HIS	A	346	10.649	42.711	52.007	1.00	24.13	AAAA
ATOM	2562	CA	HIS	A	346	11.334	41.423	52.017	1.00	24.67	AAAA
ATOM	2563	CB	HIS	A	346	12.229	41.213	50.780	1.00	21.99	AAAA
ATOM	2564	CG	HIS	A	346	11.601	41.589	49.471	1.00	21.05	AAAA
ATOM	2565	CD2	HIS	A	346	10.548	42.384	49.175	1.00	19.73	AAAA
ATOM	2566	ND1	HIS	A	346	12.163	41.239	48.262	1.00	20.79	AAAA
ATOM	2567	CE1	HIS	A	346	11.492	41.810	47.282	1.00	18.08	AAAA
ATOM	2568	NE2	HIS	A	346	10.507	42.512	47.809	1.00	20.27	AAAA
ATOM	2569	C	HIS	A	346	12.246	41.366	53.247	1.00	24.57	AAAA
ATOM	2570	O	HIS	A	346	12.936	42.329	53.541	1.00	26.73	AAAA
ATOM	2571	N	ILE	A	347	12.243	40.257	53.975	1.00	22.65	AAAA
ATOM	2572	CA	ILE	A	347	13.154	40.116	55.107	1.00	20.96	AAAA
ATOM	2573	CB	ILE	A	347	12.435	40.043	56.451	1.00	20.20	AAAA
ATOM	2574	CG2	ILE	A	347	13.439	40.274	57.544	1.00	16.98	AAAA
ATOM	2575	CG1	ILE	A	347	11.311	41.082	56.506	1.00	19.43	AAAA
ATOM	2576	CD1	ILE	A	347	10.428	40.991	57.736	1.00	16.73	AAAA
ATOM	2577	C	ILE	A	347	13.899	38.807	54.896	1.00	19.75	AAAA
ATOM	2578	O	ILE	A	347	13.392	37.745	55.161	1.00	19.25	AAAA
ATOM	2579	N	LEU	A	348	15.115	38.895	54.405	1.00	20.87	AAAA
ATOM	2580	CA	LEU	A	348	15.903	37.707	54.137	1.00	22.41	AAAA
ATOM	2581	CB	LEU	A	348	16.563	37.842	52.764	1.00	21.31	AAAA
ATOM	2582	CG	LEU	A	348	15.719	38.442	51.654	1.00	17.67	AAAA
ATOM	2583	CD1	LEU	A	348	16.607	38.846	50.524	1.00	15.88	AAAA
ATOM	2584	CD2	LEU	A	348	14.692	37.444	51.223	1.00	18.16	AAAA
ATOM	2585	C	LEU	A	348	16.991	37.489	55.182	1.00	23.10	AAAA
ATOM	2586	O	LEU	A	348	17.299	38.384	55.955	1.00	22.89	AAAA
ATOM	2587	N	PRO	A	349	17.581	36.282	55.210	1.00	24.96	AAAA
ATOM	2588	CD	PRO	A	349	17.149	35.086	54.464	1.00	24.43	AAAA
ATOM	2589	CA	PRO	A	349	18.648	35.929	56.148	1.00	26.15	AAAA
ATOM	2590	CB	PRO	A	349	19.192	34.643	55.557	1.00	24.99	AAAA
ATOM	2591	CG	PRO	A	349	17.936	33.979	55.141	1.00	26.14	AAAA
ATOM	2592	C	PRO	A	349	19.708	37.010	56.256	1.00	27.58	AAAA
ATOM	2593	O	PRO	A	349	20.121	37.371	57.357	1.00	27.79	AAAA
ATOM	2594	N	VAL	A	350	20.131	37.536	55.111	1.00	28.28	AAAA
ATOM	2595	CA	VAL	A	350	21.155	38.575	55.097	1.00	29.85	AAAA
ATOM	2596	CB	VAL	A	350	21.292	39.242	53.673	1.00	31.11	AAAA
ATOM	2597	CG1	VAL	A	350	20.125	40.187	53.395	1.00	30.25	AAAA
ATOM	2598	CG2	VAL	A	350	22.616	39.987	53.571	1.00	29.62	AAAA
ATOM	2599	C	VAL	A	350	20.886	39.656	56.141	1.00	28.88	AAAA
ATOM	2600	O	VAL	A	350	21.786	40.073	56.854	1.00	29.56	AAAA
ATOM	2601	N	ALA	A	351	19.641	40.089	56.242	1.00	28.53	AAAA
ATOM	2602	CA	ALA	A	351	19.292	41.134	57.185	1.00	30.16	AAAA
ATOM	2603	CB	ALA	A	351	17.785	41.205	57.350	1.00	28.34	AAAA
ATOM	2604	C	ALA	A	351	19.955	40.941	58.541	1.00	31.59	AAAA
ATOM	2605	O	ALA	A	351	20.629	41.842	59.050	1.00	32.54	AAAA
ATOM	2606	N	PHE	A	352	19.781	39.755	59.111	1.00	32.06	AAAA
ATOM	2607	CA	PHE	A	352	20.319	39.449	60.430	1.00	31.71	AAAA
ATOM	2608	CB	PHE	A	352	19.421	38.401	61.080	1.00	28.75	AAAA
ATOM	2609	CG	PHE	A	352	17.966	38.747	60.998	1.00	29.08	AAAA
ATOM	2610	CD1	PHE	A	352	17.113	38.050	60.151	1.00	29.43	AAAA
ATOM	2611	CD2	PHE	A	352	17.453	39.818	61.725	1.00	29.18	AAAA
ATOM	2612	CE1	PHE	A	352	15.770	38.415	60.023	1.00	27.79	AAAA
ATOM	2613	CE2	PHE	A	352	16.113	40.194	61.606	1.00	29.36	AAAA
ATOM	2614	CZ	PHE	A	352	15.269	39.489	60.751	1.00	28.07	AAAA
ATOM	2615	C	PHE	A	352	21.781	39.015	60.436	1.00	32.70	AAAA
ATOM	2616	O	PHE	A	352	22.463	39.123	61.456	1.00	32.27	AAAA
ATOM	2617	N	ARG	A	353	22.268	38.550	59.289	1.00	34.30	AAAA
ATOM	2618	CA	ARG	A	353	23.649	38.101	59.174	1.00	36.18	AAAA
ATOM	2619	CB	ARG	A	353	23.755	36.983	58.138	1.00	38.21	AAAA
ATOM	2620	CG	ARG	A	353	23.058	35.687	58.527	1.00	43.11	AAAA

ATOM	2621	CD	ARG	A	353	23.334	34.600	57.492	1.00	47.02	AAAA
ATOM	2622	NE	ARG	A	353	23.358	33.260	58.084	1.00	52.71	AAAA
ATOM	2623	CZ	ARG	A	353	24.189	32.868	59.057	1.00	55.01	AAAA
ATOM	2624	NH1	ARG	A	353	25.083	33.712	59.570	1.00	54.88	AAAA
ATOM	2625	NH2	ARG	A	353	24.128	31.623	59.519	1.00	55.46	AAAA
ATOM	2626	C	ARG	A	353	24.612	39.219	58.795	1.00	36.63	AAAA
ATOM	2627	O	ARG	A	353	25.816	39.097	58.996	1.00	36.71	AAAA
ATOM	2628	N	GLY	A	354	24.075	40.312	58.266	1.00	37.39	AAAA
ATOM	2629	CA	GLY	A	354	24.914	41.408	57.832	1.00	37.72	AAAA
ATOM	2630	C	GLY	A	354	25.252	41.128	56.383	1.00	39.16	AAAA
ATOM	2631	O	GLY	A	354	24.891	40.070	55.872	1.00	39.55	AAAA
ATOM	2632	N	ASP	A	355	25.920	42.061	55.711	1.00	41.10	AAAA
ATOM	2633	CA	ASP	A	355	26.306	41.870	54.309	1.00	43.01	AAAA
ATOM	2634	CB	ASP	A	355	25.185	42.306	53.362	1.00	42.70	AAAA
ATOM	2635	CG	ASP	A	355	25.474	41.937	51.923	1.00	43.61	AAAA
ATOM	2636	OD1	ASP	A	355	25.662	40.737	51.624	1.00	43.53	AAAA
ATOM	2637	OD2	ASP	A	355	25.519	42.848	51.085	1.00	44.20	AAAA
ATOM	2638	C	ASP	A	355	27.565	42.651	53.976	1.00	43.78	AAAA
ATOM	2639	O	ASP	A	355	27.517	43.867	53.800	1.00	44.50	AAAA
ATOM	2640	N	SER	A	356	28.683	41.939	53.870	1.00	45.03	AAAA
ATOM	2641	CA	SER	A	356	29.978	42.553	53.587	1.00	46.10	AAAA
ATOM	2642	CB	SER	A	356	31.088	41.744	54.266	1.00	46.34	AAAA
ATOM	2643	OG	SER	A	356	30.887	41.679	55.667	0.01	46.23	AAAA
ATOM	2644	C	SER	A	356	30.303	42.721	52.101	1.00	46.38	AAAA
ATOM	2645	O	SER	A	356	31.413	42.425	51.654	1.00	45.67	AAAA
ATOM	2646	N	PHE	A	357	29.327	43.206	51.345	1.00	46.19	AAAA
ATOM	2647	CA	PHE	A	357	29.492	43.433	49.922	1.00	46.13	AAAA
ATOM	2648	CB	PHE	A	357	29.004	42.221	49.123	1.00	45.79	AAAA
ATOM	2649	CG	PHE	A	357	29.748	40.950	49.427	0.01	45.98	AAAA
ATOM	2650	CD1	PHE	A	357	31.106	40.838	49.147	0.01	46.04	AAAA
ATOM	2651	CD2	PHE	A	357	29.091	39.866	50.000	0.01	46.03	AAAA
ATOM	2652	CE1	PHE	A	357	31.800	39.663	49.432	0.01	46.07	AAAA
ATOM	2653	CE2	PHE	A	357	29.776	38.686	50.289	0.01	46.07	AAAA
ATOM	2654	CZ	PHE	A	357	31.132	38.586	50.005	0.01	46.06	AAAA
ATOM	2655	C	PHE	A	357	28.642	44.642	49.607	1.00	46.59	AAAA
ATOM	2656	O	PHE	A	357	28.840	45.311	48.601	1.00	46.36	AAAA
ATOM	2657	N	THR	A	358	27.688	44.904	50.496	1.00	48.40	AAAA
ATOM	2658	CA	THR	A	358	26.761	46.032	50.381	1.00	49.74	AAAA
ATOM	2659	CB	THR	A	358	25.304	45.547	50.398	1.00	49.89	AAAA
ATOM	2660	OG1	THR	A	358	24.458	46.545	49.821	1.00	50.66	AAAA
ATOM	2661	CG2	THR	A	358	24.856	45.276	51.831	1.00	50.72	AAAA
ATOM	2662	C	THR	A	358	26.992	46.935	51.596	1.00	49.91	AAAA
ATOM	2663	O	THR	A	358	26.287	47.926	51.817	1.00	49.11	AAAA
ATOM	2664	N	HIS	A	359	27.998	46.552	52.375	1.00	49.96	AAAA
ATOM	2665	CA	HIS	A	359	28.394	47.255	53.575	1.00	49.75	AAAA
ATOM	2666	CB	HIS	A	359	29.119	48.547	53.221	1.00	51.53	AAAA
ATOM	2667	CG	HIS	A	359	30.573	48.346	52.936	1.00	53.85	AAAA
ATOM	2668	CD2	HIS	A	359	31.612	48.086	53.765	1.00	54.00	AAAA
ATOM	2669	ND1	HIS	A	359	31.092	48.349	51.659	1.00	55.08	AAAA
ATOM	2670	CE1	HIS	A	359	32.388	48.101	51.713	1.00	55.44	AAAA
ATOM	2671	NE2	HIS	A	359	32.728	47.937	52.979	1.00	55.36	AAAA
ATOM	2672	C	HIS	A	359	27.263	47.532	54.530	1.00	48.81	AAAA
ATOM	2673	O	HIS	A	359	26.965	48.681	54.854	1.00	49.35	AAAA
ATOM	2674	N	THR	A	360	26.630	46.458	54.980	1.00	46.71	AAAA
ATOM	2675	CA	THR	A	360	25.548	46.574	55.931	1.00	45.14	AAAA
ATOM	2676	CB	THR	A	360	24.223	46.012	55.407	1.00	45.92	AAAA
ATOM	2677	OG1	THR	A	360	23.611	46.939	54.503	1.00	45.44	AAAA
ATOM	2678	CG2	THR	A	360	23.290	45.749	56.585	1.00	45.78	AAAA
ATOM	2679	C	THR	A	360	25.877	45.774	57.169	1.00	43.06	AAAA
ATOM	2680	O	THR	A	360	26.137	44.582	57.086	1.00	41.66	AAAA
ATOM	2681	N	PRO	A	361	25.867	46.423	58.338	1.00	41.54	AAAA
ATOM	2682	CD	PRO	A	361	25.605	47.845	58.623	1.00	39.84	AAAA
ATOM	2683	CA	PRO	A	361	26.168	45.688	59.565	1.00	39.96	AAAA
ATOM	2684	CB	PRO	A	361	26.242	46.795	60.611	1.00	39.58	AAAA
ATOM	2685	CG	PRO	A	361	25.278	47.814	60.092	1.00	38.12	AAAA
ATOM	2686	C	PRO	A	361	25.010	44.736	59.824	1.00	39.49	AAAA
ATOM	2687	O	PRO	A	361	23.931	44.900	59.251	1.00	39.19	AAAA
ATOM	2688	N	PRO	A	362	25.218	43.715	60.660	1.00	38.53	AAAA
ATOM	2689	CD	PRO	A	362	26.405	43.341	61.437	1.00	38.86	AAAA
ATOM	2690	CA	PRO	A	362	24.106	42.803	60.927	1.00	39.26	AAAA
ATOM	2691	CB	PRO	A	362	24.727	41.768	61.867	1.00	39.13	AAAA
ATOM	2692	CG	PRO	A	362	25.794	42.539	62.557	1.00	39.02	AAAA
ATOM	2693	C	PRO	A	362	23.006	43.636	61.581	1.00	39.38	AAAA
ATOM	2694	O	PRO	A	362	23.280	44.721	62.074	1.00	40.08	AAAA
ATOM	2695	N	LEU	A	363	21.770	43.150	61.591	1.00	40.18	AAAA

ATOM	2696	CA	LEU	A	363	20.675	43.927	62.174	1.00	40.62	AAAA
ATOM	2697	CB	LEU	A	363	19.336	43.470	61.591	1.00	39.41	AAAA
ATOM	2698	CG	LEU	A	363	18.287	44.551	61.333	1.00	37.78	AAAA
ATOM	2699	CD1	LEU	A	363	16.907	43.909	61.320	1.00	37.95	AAAA
ATOM	2700	CD2	LEU	A	363	18.363	45.618	62.399	1.00	36.56	AAAA
ATOM	2701	C	LEU	A	363	20.609	43.873	63.693	1.00	41.37	AAAA
ATOM	2702	O	LEU	A	363	21.585	44.156	64.372	1.00	42.50	AAAA
ATOM	2703	N	ASP	A	364	19.446	43.512	64.215	1.00	41.89	AAAA
ATOM	2704	CA	ASP	A	364	19.217	43.413	65.646	1.00	42.91	AAAA
ATOM	2705	CB	ASP	A	364	19.470	44.742	66.346	1.00	45.55	AAAA
ATOM	2706	CG	ASP	A	364	18.838	44.799	67.738	1.00	49.19	AAAA
ATOM	2707	OD1	ASP	A	364	17.600	44.610	67.861	1.00	49.01	AAAA
ATOM	2708	OD2	ASP	A	364	19.587	45.039	68.712	1.00	50.99	AAAA
ATOM	2709	C	ASP	A	364	17.772	43.063	65.828	1.00	42.85	AAAA
ATOM	2710	O	ASP	A	364	16.895	43.821	65.461	1.00	43.49	AAAA
ATOM	2711	N	PRO	A	365	17.498	41.917	66.424	1.00	43.16	AAAA
ATOM	2712	CD	PRO	A	365	18.446	40.955	67.002	1.00	43.79	AAAA
ATOM	2713	CA	PRO	A	365	16.118	41.496	66.637	1.00	44.05	AAAA
ATOM	2714	CB	PRO	A	365	16.264	40.374	67.651	1.00	45.08	AAAA
ATOM	2715	CG	PRO	A	365	17.565	39.751	67.246	1.00	45.01	AAAA
ATOM	2716	C	PRO	A	365	15.206	42.600	67.139	1.00	44.84	AAAA
ATOM	2717	O	PRO	A	365	14.234	42.972	66.487	1.00	44.39	AAAA
ATOM	2718	N	GLN	A	366	15.537	43.128	68.307	1.00	46.50	AAAA
ATOM	2719	CA	GLN	A	366	14.726	44.159	68.937	1.00	47.06	AAAA
ATOM	2720	CB	GLN	A	366	15.371	44.604	70.252	1.00	49.89	AAAA
ATOM	2721	CG	GLN	A	366	15.459	43.494	71.304	1.00	52.59	AAAA
ATOM	2722	CD	GLN	A	366	16.118	42.229	70.769	1.00	55.38	AAAA
ATOM	2723	OE1	GLN	A	366	17.267	42.257	70.304	1.00	56.58	AAAA
ATOM	2724	NE2	GLN	A	366	15.390	41.112	70.824	1.00	55.73	AAAA
ATOM	2725	C	GLN	A	366	14.530	45.336	68.021	1.00	45.23	AAAA
ATOM	2726	O	GLN	A	366	13.642	46.158	68.231	1.00	45.05	AAAA
ATOM	2727	N	GLU	A	367	15.353	45.403	66.988	1.00	43.78	AAAA
ATOM	2728	CA	GLU	A	367	15.262	46.496	66.039	1.00	42.82	AAAA
ATOM	2729	CB	GLU	A	367	16.549	46.605	65.234	1.00	42.28	AAAA
ATOM	2730	CG	GLU	A	367	16.670	47.912	64.521	1.00	43.35	AAAA
ATOM	2731	CD	GLU	A	367	16.888	49.043	65.487	1.00	43.52	AAAA
ATOM	2732	OE1	GLU	A	367	17.945	49.040	66.154	1.00	44.62	AAAA
ATOM	2733	OE2	GLU	A	367	16.007	49.923	65.586	1.00	41.73	AAAA
ATOM	2734	C	GLU	A	367	14.090	46.337	65.085	1.00	41.61	AAAA
ATOM	2735	O	GLU	A	367	13.681	47.302	64.452	1.00	41.78	AAAA
ATOM	2736	N	LEU	A	368	13.561	45.120	64.985	1.00	40.31	AAAA
ATOM	2737	CA	LEU	A	368	12.448	44.833	64.093	1.00	39.26	AAAA
ATOM	2738	CB	LEU	A	368	12.378	43.329	63.769	1.00	39.94	AAAA
ATOM	2739	CG	LEU	A	368	13.376	42.610	62.839	1.00	40.99	AAAA
ATOM	2740	CD1	LEU	A	368	13.114	41.107	62.895	1.00	40.05	AAAA
ATOM	2741	CD2	LEU	A	368	13.241	43.103	61.400	1.00	40.65	AAAA
ATOM	2742	C	LEU	A	368	11.144	45.259	64.729	1.00	38.31	AAAA
ATOM	2743	O	LEU	A	368	10.093	45.208	64.106	1.00	38.64	AAAA
ATOM	2744	N	ASP	A	369	11.214	45.684	65.978	1.00	38.07	AAAA
ATOM	2745	CA	ASP	A	369	10.018	46.096	66.704	1.00	38.84	AAAA
ATOM	2746	CB	ASP	A	369	10.375	46.331	68.173	1.00	40.58	AAAA
ATOM	2747	CG	ASP	A	369	10.563	45.030	68.935	1.00	43.59	AAAA
ATOM	2748	OD1	ASP	A	369	11.062	44.054	68.326	1.00	43.80	AAAA
ATOM	2749	OD2	ASP	A	369	10.216	44.984	70.139	1.00	45.21	AAAA
ATOM	2750	C	ASP	A	369	9.341	47.330	66.122	1.00	37.71	AAAA
ATOM	2751	O	ASP	A	369	8.199	47.661	66.474	1.00	37.34	AAAA
ATOM	2752	N	ILE	A	370	10.045	47.985	65.208	1.00	35.49	AAAA
ATOM	2753	CA	ILE	A	370	9.565	49.203	64.576	1.00	33.97	AAAA
ATOM	2754	CB	ILE	A	370	10.696	49.812	63.763	1.00	32.02	AAAA
ATOM	2755	CG2	ILE	A	370	10.374	51.247	63.420	1.00	32.71	AAAA
ATOM	2756	CG1	ILE	A	370	11.983	49.726	64.579	1.00	30.10	AAAA
ATOM	2757	CD1	ILE	A	370	13.204	50.164	63.871	1.00	27.79	AAAA
ATOM	2758	C	ILE	A	370	8.339	49.010	63.685	1.00	34.32	AAAA
ATOM	2759	O	ILE	A	370	7.446	49.857	63.637	1.00	33.53	AAAA
ATOM	2760	N	LEU	A	371	8.297	47.875	63.000	1.00	35.35	AAAA
ATOM	2761	CA	LEU	A	371	7.218	47.551	62.075	1.00	36.32	AAAA
ATOM	2762	CB	LEU	A	371	7.587	46.269	61.317	1.00	35.51	AAAA
ATOM	2763	CG	LEU	A	371	8.943	46.337	60.596	1.00	35.76	AAAA
ATOM	2764	CD1	LEU	A	371	9.314	44.991	59.981	1.00	34.86	AAAA
ATOM	2765	CD2	LEU	A	371	8.874	47.411	59.525	1.00	35.82	AAAA
ATOM	2766	C	LEU	A	371	5.830	47.406	62.711	1.00	36.90	AAAA
ATOM	2767	O	LEU	A	371	4.872	47.002	62.041	1.00	37.81	AAAA
ATOM	2768	N	LYS	A	372	5.704	47.757	63.985	1.00	35.69	AAAA
ATOM	2769	CA	LYS	A	372	4.422	47.609	64.658	1.00	36.43	AAAA
ATOM	2770	CB	LYS	A	372	4.616	47.687	66.177	1.00	38.31	AAAA

ATOM	2771	CG	LYS	A	372	5.361	46.492	66.779	1.00	38.36	AAAA
ATOM	2772	CD	LYS	A	372	5.417	46.565	68.298	0.01	38.20	AAAA
ATOM	2773	CE	LYS	A	372	6.190	47.782	68.779	0.01	38.18	AAAA
ATOM	2774	NZ	LYS	A	372	6.293	47.816	70.265	0.01	38.30	AAAA
ATOM	2775	C	LYS	A	372	3.365	48.611	64.210	1.00	36.58	AAAA
ATOM	2776	O	LYS	A	372	2.187	48.485	64.554	1.00	35.43	AAAA
ATOM	2777	N	THR	A	373	3.788	49.601	63.431	1.00	36.95	AAAA
ATOM	2778	CA	THR	A	373	2.873	50.627	62.930	1.00	37.23	AAAA
ATOM	2779	CB	THR	A	373	3.564	51.991	62.907	1.00	36.94	AAAA
ATOM	2780	OG1	THR	A	373	4.762	51.930	63.690	1.00	37.13	AAAA
ATOM	2781	CG2	THR	A	373	2.646	53.055	63.482	1.00	37.38	AAAA
ATOM	2782	C	THR	A	373	2.386	50.286	61.514	1.00	37.37	AAAA
ATOM	2783	O	THR	A	373	1.381	50.813	61.041	1.00	37.04	AAAA
ATOM	2784	N	VAL	A	374	3.125	49.402	60.849	1.00	37.19	AAAA
ATOM	2785	CA	VAL	A	374	2.809	48.938	59.502	1.00	35.62	AAAA
ATOM	2786	CB	VAL	A	374	3.898	47.971	58.965	1.00	35.91	AAAA
ATOM	2787	CG1	VAL	A	374	3.415	47.302	57.696	1.00	34.07	AAAA
ATOM	2788	CG2	VAL	A	374	5.199	48.716	58.716	1.00	35.64	AAAA
ATOM	2789	C	VAL	A	374	1.527	48.157	59.607	1.00	34.77	AAAA
ATOM	2790	O	VAL	A	374	1.548	47.021	60.061	1.00	36.17	AAAA
ATOM	2791	N	LYS	A	375	0.413	48.749	59.201	1.00	33.97	AAAA
ATOM	2792	CA	LYS	A	375	-0.862	48.050	59.285	1.00	33.78	AAAA
ATOM	2793	CB	LYS	A	375	-1.858	48.883	60.078	1.00	35.98	AAAA
ATOM	2794	CG	LYS	A	375	-1.849	50.344	59.703	1.00	40.41	AAAA
ATOM	2795	CD	LYS	A	375	-2.623	51.173	60.713	1.00	46.26	AAAA
ATOM	2796	CE	LYS	A	375	-1.947	51.177	62.086	1.00	49.95	AAAA
ATOM	2797	NZ	LYS	A	375	-0.639	51.918	62.095	1.00	52.83	AAAA
ATOM	2798	C	LYS	A	375	-1.425	47.719	57.920	1.00	32.02	AAAA
ATOM	2799	O	LYS	A	375	-2.466	47.072	57.813	1.00	31.82	AAAA
ATOM	2800	N	GLU	A	376	-0.720	48.159	56.881	1.00	30.42	AAAA
ATOM	2801	CA	GLU	A	376	-1.124	47.913	55.504	1.00	28.60	AAAA
ATOM	2802	CB	GLU	A	376	-2.072	49.001	55.028	1.00	30.98	AAAA
ATOM	2803	CG	GLU	A	376	-2.610	48.777	53.640	1.00	34.83	AAAA
ATOM	2804	CD	GLU	A	376	-3.320	50.001	53.078	1.00	37.57	AAAA
ATOM	2805	OE1	GLU	A	376	-4.263	50.507	53.729	1.00	38.54	AAAA
ATOM	2806	OE2	GLU	A	376	-2.936	50.451	51.975	1.00	38.52	AAAA
ATOM	2807	C	GLU	A	376	0.068	47.879	54.572	1.00	26.77	AAAA
ATOM	2808	O	GLU	A	376	0.938	48.727	54.638	1.00	24.14	AAAA
ATOM	2809	N	ILE	A	377	0.089	46.885	53.697	1.00	26.83	AAAA
ATOM	2810	CA	ILE	A	377	1.149	46.722	52.706	1.00	26.23	AAAA
ATOM	2811	CB	ILE	A	377	1.952	45.405	52.947	1.00	24.24	AAAA
ATOM	2812	CG2	ILE	A	377	3.071	45.292	51.929	1.00	23.65	AAAA
ATOM	2813	CG1	ILE	A	377	2.509	45.372	54.371	1.00	21.92	AAAA
ATOM	2814	CD1	ILE	A	377	3.315	44.138	54.723	1.00	18.33	AAAA
ATOM	2815	C	ILE	A	377	0.448	46.625	51.341	1.00	27.37	AAAA
ATOM	2816	O	ILE	A	377	-0.417	45.762	51.172	1.00	28.29	AAAA
ATOM	2817	N	THR	A	378	0.787	47.498	50.384	1.00	26.78	AAAA
ATOM	2818	CA	THR	A	378	0.154	47.433	49.057	1.00	26.39	AAAA
ATOM	2819	CB	THR	A	378	0.204	48.766	48.300	1.00	25.65	AAAA
ATOM	2820	OG1	THR	A	378	1.546	49.250	48.246	1.00	27.23	AAAA
ATOM	2821	CG2	THR	A	378	-0.665	49.773	48.968	1.00	26.52	AAAA
ATOM	2822	C	THR	A	378	0.815	46.378	48.189	1.00	26.50	AAAA
ATOM	2823	O	THR	A	378	0.149	45.679	47.440	1.00	28.53	AAAA
ATOM	2824	N	GLY	A	379	2.132	46.268	48.280	1.00	26.30	AAAA
ATOM	2825	CA	GLY	A	379	2.823	45.254	47.512	1.00	25.36	AAAA
ATOM	2826	C	GLY	A	379	2.595	43.906	48.175	1.00	24.97	AAAA
ATOM	2827	O	GLY	A	379	1.456	43.426	48.240	1.00	22.64	AAAA
ATOM	2828	N	PHE	A	380	3.671	43.295	48.676	1.00	23.32	AAAA
ATOM	2829	CA	PHE	A	380	3.558	41.995	49.342	1.00	20.36	AAAA
ATOM	2830	CB	PHE	A	380	3.814	40.855	48.336	1.00	17.65	AAAA
ATOM	2831	CG	PHE	A	380	5.227	40.776	47.817	1.00	14.96	AAAA
ATOM	2832	CD1	PHE	A	380	6.280	40.456	48.648	1.00	14.33	AAAA
ATOM	2833	CD2	PHE	A	380	5.491	40.949	46.473	1.00	15.34	AAAA
ATOM	2834	CE1	PHE	A	380	7.564	40.307	48.144	1.00	12.95	AAAA
ATOM	2835	CE2	PHE	A	380	6.785	40.797	45.972	1.00	14.33	AAAA
ATOM	2836	CZ	PHE	A	380	7.813	40.476	46.811	1.00	11.20	AAAA
ATOM	2837	C	PHE	A	380	4.443	41.817	50.587	1.00	19.44	AAAA
ATOM	2838	O	PHE	A	380	5.214	42.702	50.955	1.00	20.13	AAAA
ATOM	2839	N	LEU	A	381	4.303	40.669	51.238	1.00	17.42	AAAA
ATOM	2840	CA	LEU	A	381	5.073	40.345	52.424	1.00	16.18	AAAA
ATOM	2841	CB	LEU	A	381	4.144	40.234	53.635	1.00	12.36	AAAA
ATOM	2842	CG	LEU	A	381	4.760	39.701	54.931	1.00	12.74	AAAA
ATOM	2843	CD1	LEU	A	381	6.111	40.356	55.174	1.00	14.23	AAAA
ATOM	2844	CD2	LEU	A	381	3.814	39.944	56.091	1.00	9.17	AAAA
ATOM	2845	C	LEU	A	381	5.785	39.022	52.197	1.00	17.34	AAAA

ATOM	2846	O	LEU	A	381	5.138	38.027	51.914	1.00	17.92	AAAA
ATOM	2847	N	LEU	A	382	7.109	39.011	52.322	1.00	17.06	AAAA
ATOM	2848	CA	LEU	A	382	7.890	37.793	52.130	1.00	16.36	AAAA
ATOM	2849	CB	LEU	A	382	8.551	37.877	50.760	1.00	14.31	AAAA
ATOM	2850	CG	LEU	A	382	9.329	36.791	50.016	1.00	14.45	AAAA
ATOM	2851	CD1	LEU	A	382	9.911	37.494	48.820	1.00	13.91	AAAA
ATOM	2852	CD2	LEU	A	382	10.446	36.173	50.818	1.00	13.22	AAAA
ATOM	2853	C	LEU	A	382	8.954	37.601	53.241	1.00	17.77	AAAA
ATOM	2854	O	LEU	A	382	9.998	38.253	53.231	1.00	18.23	AAAA
ATOM	2855	N	ILE	A	383	8.687	36.725	54.210	1.00	17.68	AAAA
ATOM	2856	CA	ILE	A	383	9.653	36.469	55.287	1.00	17.23	AAAA
ATOM	2857	CB	ILE	A	383	8.983	36.296	56.702	1.00	16.19	AAAA
ATOM	2858	CG2	ILE	A	383	10.056	35.995	57.751	1.00	15.67	AAAA
ATOM	2859	CG1	ILE	A	383	8.244	37.560	57.128	1.00	15.01	AAAA
ATOM	2860	CD1	ILE	A	383	6.871	37.650	56.621	1.00	16.40	AAAA
ATOM	2861	C	ILE	A	383	10.396	35.173	54.984	1.00	16.22	AAAA
ATOM	2862	O	ILE	A	383	9.793	34.117	54.904	1.00	16.12	AAAA
ATOM	2863	N	GLN	A	384	11.706	35.259	54.816	1.00	16.26	AAAA
ATOM	2864	CA	GLN	A	384	12.517	34.082	54.533	1.00	18.54	AAAA
ATOM	2865	CB	GLN	A	384	13.348	34.282	53.270	1.00	16.65	AAAA
ATOM	2866	CG	GLN	A	384	12.630	33.950	52.006	1.00	16.87	AAAA
ATOM	2867	CD	GLN	A	384	13.574	33.977	50.847	1.00	20.47	AAAA
ATOM	2868	OE1	GLN	A	384	14.692	33.486	50.955	1.00	23.82	AAAA
ATOM	2869	NE2	GLN	A	384	13.145	34.545	49.728	1.00	21.10	AAAA
ATOM	2870	C	GLN	A	384	13.443	33.744	55.684	1.00	19.30	AAAA
ATOM	2871	O	GLN	A	384	13.895	32.610	55.821	1.00	19.44	AAAA
ATOM	2872	N	ALA	A	385	13.716	34.752	56.499	1.00	20.72	AAAA
ATOM	2873	CA	ALA	A	385	14.574	34.631	57.665	1.00	22.20	AAAA
ATOM	2874	CB	ALA	A	385	15.873	35.341	57.417	1.00	20.63	AAAA
ATOM	2875	C	ALA	A	385	13.832	35.297	58.807	1.00	24.15	AAAA
ATOM	2876	O	ALA	A	385	12.887	36.055	58.563	1.00	24.35	AAAA
ATOM	2877	N	TRP	A	386	14.239	35.001	60.043	1.00	26.14	AAAA
ATOM	2878	CA	TRP	A	386	13.618	35.600	61.226	1.00	27.11	AAAA
ATOM	2879	CB	TRP	A	386	12.232	35.005	61.490	1.00	25.61	AAAA
ATOM	2880	CG	TRP	A	386	11.385	35.904	62.333	1.00	26.84	AAAA
ATOM	2881	CD2	TRP	A	386	10.884	37.199	61.970	1.00	26.81	AAAA
ATOM	2882	CE2	TRP	A	386	10.257	37.742	63.115	1.00	27.24	AAAA
ATOM	2883	CE3	TRP	A	386	10.914	37.953	60.792	1.00	26.25	AAAA
ATOM	2884	CD1	TRP	A	386	11.038	35.719	63.641	1.00	28.21	AAAA
ATOM	2885	NE1	TRP	A	386	10.364	36.820	64.119	1.00	28.49	AAAA
ATOM	2886	CZ2	TRP	A	386	9.664	39.002	63.114	1.00	26.97	AAAA
ATOM	2887	CZ3	TRP	A	386	10.329	39.205	60.788	1.00	26.99	AAAA
ATOM	2888	CH2	TRP	A	386	9.711	39.720	61.942	1.00	27.99	AAAA
ATOM	2889	C	TRP	A	386	14.504	35.417	62.446	1.00	29.37	AAAA
ATOM	2890	O	TRP	A	386	15.247	34.441	62.532	1.00	30.57	AAAA
ATOM	2891	N	PRO	A	387	14.453	36.368	63.403	1.00	32.46	AAAA
ATOM	2892	CD	PRO	A	387	13.668	37.620	63.420	1.00	32.34	AAAA
ATOM	2893	CA	PRO	A	387	15.269	36.282	64.611	1.00	33.55	AAAA
ATOM	2894	CB	PRO	A	387	14.673	37.371	65.486	1.00	32.94	AAAA
ATOM	2895	CG	PRO	A	387	14.337	38.415	64.504	1.00	31.72	AAAA
ATOM	2896	C	PRO	A	387	15.255	34.914	65.281	1.00	36.38	AAAA
ATOM	2897	O	PRO	A	387	14.195	34.357	65.575	1.00	36.25	AAAA
ATOM	2898	N	GLU	A	388	16.461	34.400	65.518	1.00	39.78	AAAA
ATOM	2899	CA	GLU	A	388	16.709	33.101	66.148	1.00	41.63	AAAA
ATOM	2900	CB	GLU	A	388	18.201	32.974	66.488	1.00	42.15	AAAA
ATOM	2901	CG	GLU	A	388	18.583	31.671	67.172	0.01	41.61	AAAA
ATOM	2902	CD	GLU	A	388	20.054	31.618	67.534	0.01	41.54	AAAA
ATOM	2903	OE1	GLU	A	388	20.507	32.485	68.311	0.01	41.36	AAAA
ATOM	2904	OE2	GLU	A	388	20.758	30.711	67.043	0.01	41.39	AAAA
ATOM	2905	C	GLU	A	388	15.901	32.821	67.409	1.00	41.82	AAAA
ATOM	2906	O	GLU	A	388	15.315	31.748	67.553	1.00	41.17	AAAA
ATOM	2907	N	ASN	A	389	15.881	33.785	68.322	1.00	42.74	AAAA
ATOM	2908	CA	ASN	A	389	15.163	33.621	69.582	1.00	44.29	AAAA
ATOM	2909	CB	ASN	A	389	15.862	34.434	70.671	1.00	46.82	AAAA
ATOM	2910	CG	ASN	A	389	17.313	34.047	70.834	1.00	50.72	AAAA
ATOM	2911	OD1	ASN	A	389	17.629	32.902	71.167	1.00	52.31	AAAA
ATOM	2912	ND2	ASN	A	389	18.211	35.000	70.593	1.00	53.00	AAAA
ATOM	2913	C	ASN	A	389	13.682	33.988	69.549	1.00	42.77	AAAA
ATOM	2914	O	ASN	A	389	13.009	33.942	70.579	1.00	42.38	AAAA
ATOM	2915	N	ARG	A	390	13.171	34.343	68.375	1.00	40.66	AAAA
ATOM	2916	CA	ARG	A	390	11.769	34.726	68.250	1.00	37.58	AAAA
ATOM	2917	CB	ARG	A	390	11.638	35.777	67.165	1.00	36.74	AAAA
ATOM	2918	CG	ARG	A	390	12.347	37.059	67.510	1.00	36.46	AAAA
ATOM	2919	CD	ARG	A	390	11.336	38.164	67.673	1.00	36.13	AAAA
ATOM	2920	NE	ARG	A	390	11.934	39.495	67.694	1.00	32.95	AAAA

ATOM	2921	CZ	ARG	A	390	11.220	40.604	67.560	1.00	31.66	AAAA
ATOM	2922	NH1	ARG	A	390	9.899	40.523	67.398	1.00	28.04	AAAA
ATOM	2923	NH2	ARG	A	390	11.823	41.784	67.590	1.00	30.24	AAAA
ATOM	2924	C	ARG	A	390	10.812	33.568	67.984	1.00	35.12	AAAA
ATOM	2925	O	ARG	A	390	11.144	32.607	67.288	1.00	35.20	AAAA
ATOM	2926	N	THR	A	391	9.616	33.676	68.547	1.00	32.32	AAAA
ATOM	2927	CA	THR	A	391	8.610	32.632	68.406	1.00	30.62	AAAA
ATOM	2928	CB	THR	A	391	8.074	32.190	69.798	1.00	31.70	AAAA
ATOM	2929	OG1	THR	A	391	9.101	31.484	70.503	1.00	32.19	AAAA
ATOM	2930	CG2	THR	A	391	6.882	31.287	69.654	1.00	31.88	AAAA
ATOM	2931	C	THR	A	391	7.450	33.027	67.496	1.00	27.76	AAAA
ATOM	2932	O	THR	A	391	7.297	32.432	66.438	1.00	26.88	AAAA
ATOM	2933	N	ASP	A	392	6.615	33.991	67.893	1.00	25.00	AAAA
ATOM	2934	CA	ASP	A	392	5.539	34.375	66.997	1.00	22.77	AAAA
ATOM	2935	CB	ASP	A	392	4.271	34.961	67.738	1.00	20.35	AAAA
ATOM	2936	CG	ASP	A	392	4.577	36.043	68.850	1.00	20.59	AAAA
ATOM	2937	OD1	ASP	A	392	5.689	35.985	69.426	1.00	22.98	AAAA
ATOM	2938	OD2	ASP	A	392	3.681	36.915	69.176	1.00	6.51	AAAA
ATOM	2939	C	ASP	A	392	6.143	35.348	65.993	1.00	23.96	AAAA
ATOM	2940	O	ASP	A	392	7.315	35.706	66.119	1.00	22.39	AAAA
ATOM	2941	N	LEU	A	393	5.389	35.691	64.949	1.00	24.90	AAAA
ATOM	2942	CA	LEU	A	393	5.851	36.679	63.986	1.00	25.10	AAAA
ATOM	2943	CB	LEU	A	393	5.182	36.504	62.628	1.00	24.86	AAAA
ATOM	2944	CG	LEU	A	393	5.755	35.534	61.598	1.00	25.17	AAAA
ATOM	2945	CD1	LEU	A	393	4.825	35.534	60.396	1.00	26.28	AAAA
ATOM	2946	CD2	LEU	A	393	7.161	35.940	61.191	1.00	23.61	AAAA
ATOM	2947	C	LEU	A	393	5.378	37.986	64.603	1.00	26.53	AAAA
ATOM	2948	O	LEU	A	393	4.809	38.838	63.927	1.00	26.22	AAAA
ATOM	2949	N	HIS	A	394	5.582	38.110	65.912	1.00	28.69	AAAA
ATOM	2950	CA	HIS	A	394	5.189	39.303	66.645	1.00	31.28	AAAA
ATOM	2951	CB	HIS	A	394	5.348	39.103	68.165	1.00	31.31	AAAA
ATOM	2952	CG	HIS	A	394	5.100	40.337	68.976	0.01	30.34	AAAA
ATOM	2953	CD2	HIS	A	394	4.245	40.571	70.000	0.01	30.06	AAAA
ATOM	2954	ND1	HIS	A	394	5.807	41.506	68.794	0.01	30.08	AAAA
ATOM	2955	CE1	HIS	A	394	5.399	42.406	69.672	0.01	29.82	AAAA
ATOM	2956	NE2	HIS	A	394	4.452	41.863	70.415	0.01	29.81	AAAA
ATOM	2957	C	HIS	A	394	6.067	40.440	66.167	1.00	32.83	AAAA
ATOM	2958	O	HIS	A	394	7.305	40.411	66.329	1.00	33.85	AAAA
ATOM	2959	N	ALA	A	395	5.393	41.419	65.569	1.00	31.28	AAAA
ATOM	2960	CA	ALA	A	395	5.989	42.626	65.018	1.00	31.26	AAAA
ATOM	2961	CB	ALA	A	395	7.360	42.348	64.404	1.00	29.67	AAAA
ATOM	2962	C	ALA	A	395	4.992	42.989	63.942	1.00	30.83	AAAA
ATOM	2963	O	ALA	A	395	4.652	44.159	63.728	1.00	31.98	AAAA
ATOM	2964	N	PHE	A	396	4.516	41.954	63.267	1.00	28.91	AAAA
ATOM	2965	CA	PHE	A	396	3.528	42.125	62.226	1.00	26.89	AAAA
ATOM	2966	CB	PHE	A	396	3.808	41.161	61.075	1.00	21.32	AAAA
ATOM	2967	CG	PHE	A	396	4.875	41.632	60.128	1.00	17.99	AAAA
ATOM	2968	CD1	PHE	A	396	4.655	42.718	59.294	1.00	18.40	AAAA
ATOM	2969	CD2	PHE	A	396	6.080	40.965	60.030	1.00	18.25	AAAA
ATOM	2970	CE1	PHE	A	396	5.618	43.129	58.373	1.00	15.62	AAAA
ATOM	2971	CE2	PHE	A	396	7.048	41.370	59.111	1.00	18.33	AAAA
ATOM	2972	CZ	PHE	A	396	6.810	42.453	58.285	1.00	17.35	AAAA
ATOM	2973	C	PHE	A	396	2.184	41.824	62.889	1.00	27.58	AAAA
ATOM	2974	O	PHE	A	396	1.178	41.600	62.227	1.00	28.16	AAAA
ATOM	2975	N	GLU	A	397	2.186	41.828	64.216	1.00	28.26	AAAA
ATOM	2976	CA	GLU	A	397	0.979	41.549	64.977	1.00	29.34	AAAA
ATOM	2977	CB	GLU	A	397	1.225	41.750	66.468	1.00	28.76	AAAA
ATOM	2978	CG	GLU	A	397	1.702	43.152	66.817	0.01	28.09	AAAA
ATOM	2979	CD	GLU	A	397	1.739	43.406	68.309	0.01	27.69	AAAA
ATOM	2980	OE1	GLU	A	397	2.383	42.618	69.030	0.01	27.41	AAAA
ATOM	2981	OE2	GLU	A	397	1.128	44.397	68.759	0.01	27.38	AAAA
ATOM	2982	C	GLU	A	397	-0.155	42.454	64.549	1.00	30.45	AAAA
ATOM	2983	O	GLU	A	397	-1.325	42.084	64.655	1.00	29.16	AAAA
ATOM	2984	N	ASN	A	398	0.190	43.640	64.063	1.00	31.46	AAAA
ATOM	2985	CA	ASN	A	398	-0.839	44.573	63.662	1.00	32.47	AAAA
ATOM	2986	CB	ASN	A	398	-0.563	45.943	64.262	1.00	33.05	AAAA
ATOM	2987	CG	ASN	A	398	-0.836	45.978	65.744	1.00	33.60	AAAA
ATOM	2988	OD1	ASN	A	398	-1.878	45.508	66.197	1.00	33.22	AAAA
ATOM	2989	ND2	ASN	A	398	0.092	46.538	66.510	1.00	35.10	AAAA
ATOM	2990	C	ASN	A	398	-1.089	44.691	62.177	1.00	33.08	AAAA
ATOM	2991	O	ASN	A	398	-2.014	45.388	61.765	1.00	33.98	AAAA
ATOM	2992	N	LEU	A	399	-0.276	44.020	61.370	1.00	33.45	AAAA
ATOM	2993	CA	LEU	A	399	-0.479	44.051	59.929	1.00	34.10	AAAA
ATOM	2994	CB	LEU	A	399	0.566	43.189	59.221	1.00	33.27	AAAA
ATOM	2995	CG	LEU	A	399	0.387	43.095	57.704	1.00	33.81	AAAA

ATOM	2996	CD1	LEU	A	399	0.792	44.406	57.075	1.00	34.05	AAAA
ATOM	2997	CD2	LEU	A	399	1.223	41.973	57.144	1.00	32.61	AAAA
ATOM	2998	C	LEU	A	399	-1.867	43.461	59.719	1.00	34.57	AAAA
ATOM	2999	O	LEU	A	399	-2.150	42.386	60.230	1.00	34.31	AAAA
ATOM	3000	N	GLU	A	400	-2.732	44.151	58.981	1.00	36.49	AAAA
ATOM	3001	CA	GLU	A	400	-4.088	43.650	58.761	1.00	38.71	AAAA
ATOM	3002	CB	GLU	A	400	-5.083	44.444	59.605	1.00	40.21	AAAA
ATOM	3003	CG	GLU	A	400	-4.781	45.927	59.720	1.00	43.91	AAAA
ATOM	3004	CD	GLU	A	400	-5.728	46.641	60.680	1.00	46.05	AAAA
ATOM	3005	OE1	GLU	A	400	-5.439	47.800	61.048	1.00	47.71	AAAA
ATOM	3006	OE2	GLU	A	400	-6.766	46.050	61.061	1.00	46.57	AAAA
ATOM	3007	C	GLU	A	400	-4.582	43.605	57.320	1.00	39.24	AAAA
ATOM	3008	O	GLU	A	400	-5.725	43.217	57.071	1.00	40.47	AAAA
ATOM	3009	N	ILE	A	401	-3.723	43.983	56.375	1.00	38.20	AAAA
ATOM	3010	CA	ILE	A	401	-4.074	43.977	54.957	1.00	35.95	AAAA
ATOM	3011	CB	ILE	A	401	-4.971	45.211	54.581	1.00	36.24	AAAA
ATOM	3012	CG2	ILE	A	401	-4.824	45.572	53.110	1.00	35.40	AAAA
ATOM	3013	CG1	ILE	A	401	-6.439	44.907	54.877	1.00	35.97	AAAA
ATOM	3014	CD1	ILE	A	401	-7.397	46.002	54.446	1.00	34.29	AAAA
ATOM	3015	C	ILE	A	401	-2.846	43.966	54.048	1.00	34.65	AAAA
ATOM	3016	O	ILE	A	401	-2.018	44.875	54.075	1.00	34.14	AAAA
ATOM	3017	N	ILE	A	402	-2.728	42.903	53.266	1.00	33.13	AAAA
ATOM	3018	CA	ILE	A	402	-1.669	42.770	52.278	1.00	31.77	AAAA
ATOM	3019	CB	ILE	A	402	-0.939	41.414	52.387	1.00	31.12	AAAA
ATOM	3020	CG2	ILE	A	402	0.121	41.310	51.310	1.00	30.45	AAAA
ATOM	3021	CG1	ILE	A	402	-0.286	41.275	53.764	1.00	31.27	AAAA
ATOM	3022	CD1	ILE	A	402	0.466	39.955	53.976	1.00	30.83	AAAA
ATOM	3023	C	ILE	A	402	-2.533	42.795	51.015	1.00	31.01	AAAA
ATOM	3024	O	ILE	A	402	-3.353	41.905	50.829	1.00	30.87	AAAA
ATOM	3025	N	ARG	A	403	-2.379	43.819	50.175	1.00	29.97	AAAA
ATOM	3026	CA	ARG	A	403	-3.199	43.961	48.968	1.00	28.60	AAAA
ATOM	3027	CB	ARG	A	403	-3.325	45.435	48.580	1.00	30.57	AAAA
ATOM	3028	CG	ARG	A	403	-4.044	46.286	49.608	1.00	31.43	AAAA
ATOM	3029	CD	ARG	A	403	-4.172	47.712	49.128	1.00	31.13	AAAA
ATOM	3030	NE	ARG	A	403	-4.524	48.613	50.217	1.00	31.94	AAAA
ATOM	3031	CZ	ARG	A	403	-5.725	48.683	50.782	1.00	33.33	AAAA
ATOM	3032	NH1	ARG	A	403	-6.710	47.901	50.359	1.00	34.25	AAAA
ATOM	3033	NH2	ARG	A	403	-5.936	49.535	51.775	1.00	32.31	AAAA
ATOM	3034	C	ARG	A	403	-2.799	43.179	47.735	1.00	26.49	AAAA
ATOM	3035	O	ARG	A	403	-3.652	42.761	46.967	1.00	27.85	AAAA
ATOM	3036	N	GLY	A	404	-1.516	43.001	47.506	1.00	23.74	AAAA
ATOM	3037	CA	GLY	A	404	-1.136	42.244	46.334	1.00	22.08	AAAA
ATOM	3038	C	GLY	A	404	-1.030	42.983	45.010	1.00	20.50	AAAA
ATOM	3039	O	GLY	A	404	-1.103	42.347	43.950	1.00	20.17	AAAA
ATOM	3040	N	ARG	A	405	-0.855	44.305	45.066	1.00	18.31	AAAA
ATOM	3041	CA	ARG	A	405	-0.705	45.121	43.870	1.00	16.26	AAAA
ATOM	3042	CB	ARG	A	405	-0.482	46.578	44.254	1.00	15.89	AAAA
ATOM	3043	CG	ARG	A	405	-1.677	47.251	44.868	1.00	17.86	AAAA
ATOM	3044	CD	ARG	A	405	-2.495	48.010	43.841	1.00	18.89	AAAA
ATOM	3045	NE	ARG	A	405	-3.788	48.397	44.383	1.00	18.80	AAAA
ATOM	3046	CZ	ARG	A	405	-3.954	49.248	45.383	1.00	21.29	AAAA
ATOM	3047	NH1	ARG	A	405	-2.903	49.825	45.957	1.00	20.18	AAAA
ATOM	3048	NH2	ARG	A	405	-5.175	49.488	45.835	1.00	21.72	AAAA
ATOM	3049	C	ARG	A	405	0.517	44.595	43.128	1.00	16.34	AAAA
ATOM	3050	O	ARG	A	405	0.680	44.808	41.929	1.00	15.49	AAAA
ATOM	3051	N	THR	A	406	1.384	43.922	43.877	1.00	16.74	AAAA
ATOM	3052	CA	THR	A	406	2.589	43.313	43.338	1.00	16.80	AAAA
ATOM	3053	CB	THR	A	406	3.796	44.122	43.711	1.00	14.44	AAAA
ATOM	3054	OG1	THR	A	406	3.385	45.217	44.525	1.00	13.37	AAAA
ATOM	3055	CG2	THR	A	406	4.451	44.666	42.470	1.00	14.56	AAAA
ATOM	3056	C	THR	A	406	2.661	41.935	43.970	1.00	19.08	AAAA
ATOM	3057	O	THR	A	406	2.096	41.733	45.026	1.00	21.84	AAAA
ATOM	3058	N	LYS	A	407	3.321	40.975	43.339	1.00	21.08	AAAA
ATOM	3059	CA	LYS	A	407	3.394	39.631	43.918	1.00	24.24	AAAA
ATOM	3060	CB	LYS	A	407	2.317	38.736	43.314	1.00	25.48	AAAA
ATOM	3061	CG	LYS	A	407	0.917	39.264	43.423	1.00	26.64	AAAA
ATOM	3062	CD	LYS	A	407	0.015	38.519	42.461	1.00	27.09	AAAA
ATOM	3063	CE	LYS	A	407	-1.273	39.283	42.265	1.00	27.24	AAAA
ATOM	3064	NZ	LYS	A	407	-2.115	38.613	41.264	1.00	27.64	AAAA
ATOM	3065	C	LYS	A	407	4.738	38.995	43.640	1.00	25.26	AAAA
ATOM	3066	O	LYS	A	407	5.221	39.073	42.519	1.00	26.54	AAAA
ATOM	3067	N	GLN	A	408	5.354	38.355	44.630	1.00	26.03	AAAA
ATOM	3068	CA	GLN	A	408	6.644	37.735	44.346	1.00	26.43	AAAA
ATOM	3069	CB	GLN	A	408	7.312	37.172	45.603	1.00	22.84	AAAA
ATOM	3070	CG	GLN	A	408	8.598	36.401	45.298	1.00	20.07	AAAA

ATOM	3071	CD	GLN	A	408	9.799	37.285	44.948	1.00	19.10	AAAA
ATOM	3072	OE1	GLN	A	408	9.683	38.279	44.231	1.00	20.97	AAAA
ATOM	3073	NE2	GLN	A	408	10.963	36.902	45.439	1.00	13.73	AAAA
ATOM	3074	C	GLN	A	408	6.429	36.621	43.321	1.00	28.13	AAAA
ATOM	3075	O	GLN	A	408	5.594	35.720	43.510	1.00	27.71	AAAA
ATOM	3076	N	HIS	A	409	7.180	36.722	42.224	1.00	29.39	AAAA
ATOM	3077	CA	HIS	A	409	7.116	35.773	41.128	1.00	30.43	AAAA
ATOM	3078	CB	HIS	A	409	7.417	34.363	41.631	1.00	30.28	AAAA
ATOM	3079	CG	HIS	A	409	8.778	34.220	42.239	1.00	31.31	AAAA
ATOM	3080	CD2	HIS	A	409	9.224	33.453	43.260	1.00	31.17	AAAA
ATOM	3081	ND1	HIS	A	409	9.884	34.876	41.744	1.00	29.96	AAAA
ATOM	3082	CE1	HIS	A	409	10.952	34.518	42.430	1.00	28.18	AAAA
ATOM	3083	NE2	HIS	A	409	10.579	33.653	43.355	1.00	30.07	AAAA
ATOM	3084	C	HIS	A	409	5.746	35.822	40.471	1.00	31.57	AAAA
ATOM	3085	O	HIS	A	409	5.217	34.806	40.031	1.00	33.44	AAAA
ATOM	3086	N	GLY	A	410	5.177	37.018	40.409	1.00	30.51	AAAA
ATOM	3087	CA	GLY	A	410	3.879	37.186	39.804	1.00	30.25	AAAA
ATOM	3088	C	GLY	A	410	2.761	36.378	40.428	1.00	31.22	AAAA
ATOM	3089	O	GLY	A	410	1.625	36.483	39.982	1.00	31.64	AAAA
ATOM	3090	N	GLN	A	411	3.042	35.586	41.460	1.00	31.56	AAAA
ATOM	3091	CA	GLN	A	411	1.975	34.798	42.050	1.00	32.08	AAAA
ATOM	3092	CB	GLN	A	411	2.167	33.326	41.710	1.00	32.04	AAAA
ATOM	3093	CG	GLN	A	411	0.915	32.492	41.964	1.00	34.90	AAAA
ATOM	3094	CD	GLN	A	411	1.158	30.995	41.921	1.00	36.53	AAAA
ATOM	3095	OE1	GLN	A	411	1.845	30.487	41.027	1.00	38.09	AAAA
ATOM	3096	NE2	GLN	A	411	0.583	30.275	42.881	1.00	34.86	AAAA
ATOM	3097	C	GLN	A	411	1.702	34.912	43.553	1.00	34.05	AAAA
ATOM	3098	O	GLN	A	411	0.563	34.718	43.983	1.00	35.07	AAAA
ATOM	3099	N	PHE	A	412	2.704	35.233	44.367	1.00	34.72	AAAA
ATOM	3100	CA	PHE	A	412	2.453	35.284	45.818	1.00	33.37	AAAA
ATOM	3101	CB	PHE	A	412	3.446	34.353	46.530	1.00	34.26	AAAA
ATOM	3102	CG	PHE	A	412	3.572	32.988	45.883	1.00	34.35	AAAA
ATOM	3103	CD1	PHE	A	412	4.414	32.787	44.803	1.00	33.91	AAAA
ATOM	3104	CD2	PHE	A	412	2.837	31.905	46.351	1.00	35.39	AAAA
ATOM	3105	CE1	PHE	A	412	4.520	31.527	44.206	1.00	34.61	AAAA
ATOM	3106	CE2	PHE	A	412	2.943	30.647	45.757	1.00	33.94	AAAA
ATOM	3107	CZ	PHE	A	412	3.784	30.464	44.689	1.00	33.76	AAAA
ATOM	3108	C	PHE	A	412	2.442	36.669	46.483	1.00	32.19	AAAA
ATOM	3109	O	PHE	A	412	3.290	37.522	46.183	1.00	32.26	AAAA
ATOM	3110	N	SER	A	413	1.469	36.883	47.380	1.00	28.73	AAAA
ATOM	3111	CA	SER	A	413	1.331	38.156	48.091	1.00	23.99	AAAA
ATOM	3112	CB	SER	A	413	-0.097	38.697	47.966	1.00	25.26	AAAA
ATOM	3113	OG	SER	A	413	-1.044	37.859	48.592	1.00	27.13	AAAA
ATOM	3114	C	SER	A	413	1.742	38.068	49.559	1.00	20.44	AAAA
ATOM	3115	O	SER	A	413	1.907	39.075	50.220	1.00	18.68	AAAA
ATOM	3116	N	LEU	A	414	1.885	36.850	50.055	1.00	18.60	AAAA
ATOM	3117	CA	LEU	A	414	2.342	36.592	51.412	1.00	18.34	AAAA
ATOM	3118	CB	LEU	A	414	1.186	36.402	52.416	1.00	19.49	AAAA
ATOM	3119	CG	LEU	A	414	1.479	35.730	53.788	1.00	19.19	AAAA
ATOM	3120	CD1	LEU	A	414	2.153	36.689	54.720	1.00	18.65	AAAA
ATOM	3121	CD2	LEU	A	414	0.201	35.250	54.436	1.00	17.51	AAAA
ATOM	3122	C	LEU	A	414	3.102	35.290	51.270	1.00	18.50	AAAA
ATOM	3123	O	LEU	A	414	2.666	34.379	50.579	1.00	18.63	AAAA
ATOM	3124	N	ALA	A	415	4.250	35.210	51.915	1.00	17.75	AAAA
ATOM	3125	CA	ALA	A	415	5.053	34.019	51.843	1.00	16.71	AAAA
ATOM	3126	CB	ALA	A	415	5.845	34.012	50.558	1.00	14.36	AAAA
ATOM	3127	C	ALA	A	415	5.988	33.968	53.031	1.00	17.69	AAAA
ATOM	3128	O	ALA	A	415	6.851	34.830	53.184	1.00	20.04	AAAA
ATOM	3129	N	VAL	A	416	5.808	32.972	53.889	1.00	15.95	AAAA
ATOM	3130	CA	VAL	A	416	6.694	32.823	55.020	1.00	15.34	AAAA
ATOM	3131	CB	VAL	A	416	5.936	32.994	56.359	1.00	16.83	AAAA
ATOM	3132	CG1	VAL	A	416	5.291	34.371	56.400	1.00	18.73	AAAA
ATOM	3133	CG2	VAL	A	416	4.880	31.939	56.526	1.00	19.08	AAAA
ATOM	3134	C	VAL	A	416	7.297	31.445	54.875	1.00	13.65	AAAA
ATOM	3135	O	VAL	A	416	6.601	30.450	54.952	1.00	14.81	AAAA
ATOM	3136	N	VAL	A	417	8.600	31.391	54.634	1.00	12.58	AAAA
ATOM	3137	CA	VAL	A	417	9.276	30.120	54.440	1.00	12.47	AAAA
ATOM	3138	CB	VAL	A	417	9.665	29.899	52.946	1.00	10.03	AAAA
ATOM	3139	CG1	VAL	A	417	8.544	30.363	52.022	1.00	10.24	AAAA
ATOM	3140	CG2	VAL	A	417	10.948	30.626	52.628	1.00	6.51	AAAA
ATOM	3141	C	VAL	A	417	10.558	30.002	55.240	1.00	14.53	AAAA
ATOM	3142	O	VAL	A	417	11.142	31.006	55.653	1.00	13.30	AAAA
ATOM	3143	N	SER	A	418	10.979	28.752	55.441	1.00	16.16	AAAA
ATOM	3144	CA	SER	A	418	12.219	28.402	56.131	1.00	17.14	AAAA
ATOM	3145	CB	SER	A	418	13.402	28.733	55.229	1.00	18.64	AAAA

ATOM	3146	OG	SER	A	418	13.441	30.131	54.946	1.00	20.45	AAAA
ATOM	3147	C	SER	A	418	12.492	29.011	57.491	1.00	18.26	AAAA
ATOM	3148	O	SER	A	418	13.635	29.305	57.803	1.00	19.28	AAAA
ATOM	3149	N	LEU	A	419	11.474	29.194	58.315	1.00	19.77	AAAA
ATOM	3150	CA	LEU	A	419	11.707	29.783	59.625	1.00	21.54	AAAA
ATOM	3151	CB	LEU	A	419	10.660	30.868	59.900	1.00	22.58	AAAA
ATOM	3152	CG	LEU	A	419	10.440	31.898	58.783	1.00	22.74	AAAA
ATOM	3153	CD1	LEU	A	419	9.439	32.935	59.219	1.00	22.33	AAAA
ATOM	3154	CD2	LEU	A	419	11.746	32.563	58.440	1.00	24.27	AAAA
ATOM	3155	C	LEU	A	419	11.660	28.721	60.714	1.00	22.59	AAAA
ATOM	3156	O	LEU	A	419	11.458	27.543	60.437	1.00	23.35	AAAA
ATOM	3157	N	ASN	A	420	11.868	29.136	61.958	1.00	24.12	AAAA
ATOM	3158	CA	ASN	A	420	11.804	28.205	63.077	1.00	24.70	AAAA
ATOM	3159	CB	ASN	A	420	13.154	28.107	63.781	1.00	25.13	AAAA
ATOM	3160	CG	ASN	A	420	14.220	27.498	62.898	1.00	28.17	AAAA
ATOM	3161	OD1	ASN	A	420	13.948	26.570	62.139	1.00	27.99	AAAA
ATOM	3162	ND2	ASN	A	420	15.442	28.004	62.999	1.00	28.54	AAAA
ATOM	3163	C	ASN	A	420	10.727	28.642	64.061	1.00	24.96	AAAA
ATOM	3164	O	ASN	A	420	10.616	28.097	65.142	1.00	26.31	AAAA
ATOM	3165	N	ILE	A	421	9.922	29.620	63.669	1.00	24.43	AAAA
ATOM	3166	CA	ILE	A	421	8.859	30.131	64.519	1.00	23.95	AAAA
ATOM	3167	CB	ILE	A	421	8.080	31.260	63.793	1.00	23.29	AAAA
ATOM	3168	CG2	ILE	A	421	9.030	32.361	63.393	1.00	21.82	AAAA
ATOM	3169	CG1	ILE	A	421	7.392	30.717	62.545	1.00	22.64	AAAA
ATOM	3170	CD1	ILE	A	421	6.606	31.754	61.794	1.00	22.54	AAAA
ATOM	3171	C	ILE	A	421	7.877	29.056	64.996	1.00	23.53	AAAA
ATOM	3172	O	ILE	A	421	7.707	28.033	64.361	1.00	23.32	AAAA
ATOM	3173	N	THR	A	422	7.232	29.313	66.127	1.00	24.49	AAAA
ATOM	3174	CA	THR	A	422	6.266	28.397	66.723	1.00	25.40	AAAA
ATOM	3175	CB	THR	A	422	6.274	28.557	68.264	1.00	25.26	AAAA
ATOM	3176	OG1	THR	A	422	7.147	27.577	68.828	1.00	25.84	AAAA
ATOM	3177	CG2	THR	A	422	4.882	28.411	68.864	1.00	26.79	AAAA
ATOM	3178	C	THR	A	422	4.860	28.639	66.169	1.00	26.36	AAAA
ATOM	3179	O	THR	A	422	4.138	27.701	65.830	1.00	26.55	AAAA
ATOM	3180	N	SER	A	423	4.460	29.898	66.092	1.00	25.72	AAAA
ATOM	3181	CA	SER	A	423	3.155	30.214	65.549	1.00	25.13	AAAA
ATOM	3182	CB	SER	A	423	2.169	30.559	66.666	1.00	24.84	AAAA
ATOM	3183	OG	SER	A	423	2.160	31.944	66.948	1.00	24.26	AAAA
ATOM	3184	C	SER	A	423	3.380	31.406	64.639	1.00	24.94	AAAA
ATOM	3185	O	SER	A	423	4.521	31.868	64.507	1.00	22.61	AAAA
ATOM	3186	N	LEU	A	424	2.310	31.895	64.006	1.00	24.92	AAAA
ATOM	3187	CA	LEU	A	424	2.431	33.040	63.102	1.00	25.28	AAAA
ATOM	3188	CB	LEU	A	424	1.540	32.853	61.861	1.00	20.44	AAAA
ATOM	3189	CG	LEU	A	424	1.973	31.712	60.933	1.00	14.15	AAAA
ATOM	3190	CD1	LEU	A	424	1.051	31.620	59.755	1.00	11.68	AAAA
ATOM	3191	CD2	LEU	A	424	3.385	31.936	60.492	1.00	8.73	AAAA
ATOM	3192	C	LEU	A	424	2.135	34.363	63.802	1.00	26.98	AAAA
ATOM	3193	O	LEU	A	424	2.804	35.363	63.562	1.00	27.93	AAAA
ATOM	3194	N	GLY	A	425	1.146	34.365	64.683	1.00	28.38	AAAA
ATOM	3195	CA	GLY	A	425	0.833	35.576	65.416	1.00	29.71	AAAA
ATOM	3196	C	GLY	A	425	0.512	36.795	64.573	1.00	31.10	AAAA
ATOM	3197	O	GLY	A	425	1.002	37.894	64.831	1.00	32.15	AAAA
ATOM	3198	N	LEU	A	426	-0.304	36.601	63.548	1.00	30.41	AAAA
ATOM	3199	CA	LEU	A	426	-0.716	37.697	62.696	1.00	29.01	AAAA
ATOM	3200	CB	LEU	A	426	-0.585	37.313	61.217	1.00	27.22	AAAA
ATOM	3201	CG	LEU	A	426	0.822	36.874	60.783	1.00	27.54	AAAA
ATOM	3202	CD1	LEU	A	426	0.813	36.612	59.310	1.00	26.93	AAAA
ATOM	3203	CD2	LEU	A	426	1.856	37.918	61.108	1.00	25.33	AAAA
ATOM	3204	C	LEU	A	426	-2.166	37.880	63.101	1.00	29.26	AAAA
ATOM	3205	O	LEU	A	426	-3.091	37.571	62.345	1.00	30.59	AAAA
ATOM	3206	N	ARG	A	427	-2.335	38.368	64.325	1.00	26.97	AAAA
ATOM	3207	CA	ARG	A	427	-3.637	38.591	64.927	1.00	27.28	AAAA
ATOM	3208	CB	ARG	A	427	-3.461	38.876	66.418	1.00	27.67	AAAA
ATOM	3209	CG	ARG	A	427	-2.665	40.136	66.719	0.01	27.18	AAAA
ATOM	3210	CD	ARG	A	427	-2.551	40.378	68.215	0.01	26.77	AAAA
ATOM	3211	NE	ARG	A	427	-1.844	41.620	68.515	0.01	26.56	AAAA
ATOM	3212	CZ	ARG	A	427	-1.616	42.072	69.744	0.01	26.37	AAAA
ATOM	3213	NH1	ARG	A	427	-2.039	41.385	70.796	0.01	26.45	AAAA
ATOM	3214	NH2	ARG	A	427	-0.965	43.214	69.921	0.01	26.46	AAAA
ATOM	3215	C	ARG	A	427	-4.473	39.700	64.308	1.00	28.14	AAAA
ATOM	3216	O	ARG	A	427	-5.689	39.697	64.435	1.00	28.91	AAAA
ATOM	3217	N	SER	A	428	-3.831	40.653	63.647	1.00	28.65	AAAA
ATOM	3218	CA	SER	A	428	-4.561	41.754	63.031	1.00	29.14	AAAA
ATOM	3219	CB	SER	A	428	-3.701	43.017	63.018	1.00	28.35	AAAA
ATOM	3220	OG	SER	A	428	-3.193	43.322	64.298	1.00	27.12	AAAA

ATOM	3221	C	SER	A	428	-4.997	41.443	61.600	1.00	31.11	AAAA
ATOM	3222	O	SER	A	428	-6.055	41.885	61.170	1.00	32.26	AAAA
ATOM	3223	N	LEU	A	429	-4.167	40.688	60.878	1.00	32.31	AAAA
ATOM	3224	CA	LEU	A	429	-4.403	40.307	59.487	1.00	32.56	AAAA
ATOM	3225	CB	LEU	A	429	-3.482	39.147	59.131	1.00	33.01	AAAA
ATOM	3226	CG	LEU	A	429	-3.423	38.711	57.669	1.00	34.04	AAAA
ATOM	3227	CD1	LEU	A	429	-3.148	39.910	56.785	1.00	35.70	AAAA
ATOM	3228	CD2	LEU	A	429	-2.326	37.677	57.500	1.00	33.40	AAAA
ATOM	3229	C	LEU	A	429	-5.843	39.945	59.166	1.00	34.03	AAAA
ATOM	3230	O	LEU	A	429	-6.313	38.866	59.506	1.00	34.39	AAAA
ATOM	3231	N	LYS	A	430	-6.535	40.845	58.475	1.00	35.80	AAAA
ATOM	3232	CA	LYS	A	430	-7.940	40.635	58.133	1.00	36.74	AAAA
ATOM	3233	CB	LYS	A	430	-8.775	41.767	58.742	1.00	38.45	AAAA
ATOM	3234	CG	LYS	A	430	-10.252	41.766	58.367	1.00	40.34	AAAA
ATOM	3235	CD	LYS	A	430	-10.956	40.509	58.856	0.01	39.48	AAAA
ATOM	3236	CE	LYS	A	430	-10.941	40.417	60.373	0.01	39.55	AAAA
ATOM	3237	NZ	LYS	A	430	-11.620	41.581	61.003	0.01	39.49	AAAA
ATOM	3238	C	LYS	A	430	-8.255	40.512	56.638	1.00	36.91	AAAA
ATOM	3239	O	LYS	A	430	-9.345	40.065	56.279	1.00	36.85	AAAA
ATOM	3240	N	GLU	A	431	-7.317	40.892	55.769	1.00	37.07	AAAA
ATOM	3241	CA	GLU	A	431	-7.554	40.802	54.323	1.00	36.97	AAAA
ATOM	3242	CB	GLU	A	431	-8.325	42.036	53.825	1.00	41.60	AAAA
ATOM	3243	CG	GLU	A	431	-8.338	42.180	52.287	1.00	45.92	AAAA
ATOM	3244	CD	GLU	A	431	-8.997	43.466	51.799	1.00	48.14	AAAA
ATOM	3245	OE1	GLU	A	431	-8.576	44.557	52.235	1.00	48.87	AAAA
ATOM	3246	OE2	GLU	A	431	-9.932	43.384	50.971	1.00	49.84	AAAA
ATOM	3247	C	GLU	A	431	-6.357	40.617	53.406	1.00	33.55	AAAA
ATOM	3248	O	GLU	A	431	-5.345	41.292	53.534	1.00	33.05	AAAA
ATOM	3249	N	ILE	A	432	-6.514	39.714	52.449	1.00	31.23	AAAA
ATOM	3250	CA	ILE	A	432	-5.482	39.447	51.460	1.00	30.79	AAAA
ATOM	3251	CB	ILE	A	432	-4.898	38.020	51.622	1.00	29.85	AAAA
ATOM	3252	CG2	ILE	A	432	-3.723	37.819	50.655	1.00	27.79	AAAA
ATOM	3253	CG1	ILE	A	432	-4.390	37.843	53.057	1.00	29.53	AAAA
ATOM	3254	CD1	ILE	A	432	-3.771	36.505	53.343	1.00	28.85	AAAA
ATOM	3255	C	ILE	A	432	-6.090	39.647	50.062	1.00	30.16	AAAA
ATOM	3256	O	ILE	A	432	-6.424	38.696	49.354	1.00	29.48	AAAA
ATOM	3257	N	SER	A	433	-6.224	40.924	49.705	1.00	28.54	AAAA
ATOM	3258	CA	SER	A	433	-6.788	41.401	48.446	1.00	26.94	AAAA
ATOM	3259	CB	SER	A	433	-6.196	42.772	48.086	1.00	24.30	AAAA
ATOM	3260	OG	SER	A	433	-6.654	43.795	48.935	1.00	21.76	AAAA
ATOM	3261	C	SER	A	433	-6.634	40.498	47.238	1.00	27.53	AAAA
ATOM	3262	O	SER	A	433	-7.619	40.086	46.627	1.00	28.23	AAAA
ATOM	3263	N	ASP	A	434	-5.391	40.218	46.881	1.00	27.44	AAAA
ATOM	3264	CA	ASP	A	434	-5.099	39.410	45.713	1.00	28.56	AAAA
ATOM	3265	CB	ASP	A	434	-4.855	40.334	44.524	1.00	28.00	AAAA
ATOM	3266	CG	ASP	A	434	-4.550	39.589	43.245	1.00	29.39	AAAA
ATOM	3267	OD1	ASP	A	434	-3.986	40.213	42.320	1.00	31.03	AAAA
ATOM	3268	OD2	ASP	A	434	-4.876	38.394	43.151	1.00	28.96	AAAA
ATOM	3269	C	ASP	A	434	-3.856	38.602	46.005	1.00	29.95	AAAA
ATOM	3270	O	ASP	A	434	-3.291	38.702	47.094	1.00	31.36	AAAA
ATOM	3271	N	GLY	A	435	-3.434	37.797	45.040	1.00	30.06	AAAA
ATOM	3272	CA	GLY	A	435	-2.240	36.993	45.221	1.00	32.04	AAAA
ATOM	3273	C	GLY	A	435	-2.398	35.722	46.032	1.00	32.28	AAAA
ATOM	3274	O	GLY	A	435	-3.365	35.544	46.766	1.00	32.40	AAAA
ATOM	3275	N	ASP	A	436	-1.427	34.833	45.900	1.00	33.12	AAAA
ATOM	3276	CA	ASP	A	436	-1.466	33.579	46.623	1.00	35.15	AAAA
ATOM	3277	CB	ASP	A	436	-0.908	32.463	45.750	1.00	36.04	AAAA
ATOM	3278	CG	ASP	A	436	-1.909	32.000	44.712	1.00	37.06	AAAA
ATOM	3279	OD1	ASP	A	436	-2.845	32.774	44.401	1.00	36.60	AAAA
ATOM	3280	OD2	ASP	A	436	-1.756	30.873	44.206	1.00	37.05	AAAA
ATOM	3281	C	ASP	A	436	-0.734	33.664	47.947	1.00	35.28	AAAA
ATOM	3282	O	ASP	A	436	-0.068	34.663	48.231	1.00	36.09	AAAA
ATOM	3283	N	VAL	A	437	-0.868	32.616	48.756	1.00	33.59	AAAA
ATOM	3284	CA	VAL	A	437	-0.260	32.586	50.076	1.00	33.40	AAAA
ATOM	3285	CB	VAL	A	437	-1.322	32.861	51.166	1.00	32.21	AAAA
ATOM	3286	CG1	VAL	A	437	-0.765	32.524	52.533	1.00	30.82	AAAA
ATOM	3287	CG2	VAL	A	437	-1.766	34.315	51.112	1.00	30.45	AAAA
ATOM	3288	C	VAL	A	437	0.404	31.266	50.403	1.00	33.87	AAAA
ATOM	3289	O	VAL	A	437	-0.275	30.320	50.782	1.00	36.67	AAAA
ATOM	3290	N	ILE	A	438	1.724	31.194	50.285	1.00	32.37	AAAA
ATOM	3291	CA	ILE	A	438	2.411	29.949	50.598	1.00	31.52	AAAA
ATOM	3292	CB	ILE	A	438	3.493	29.628	49.566	1.00	31.25	AAAA
ATOM	3293	CG2	ILE	A	438	4.432	30.821	49.404	1.00	30.53	AAAA
ATOM	3294	CG1	ILE	A	438	4.235	28.353	49.993	1.00	29.94	AAAA
ATOM	3295	CD1	ILE	A	438	5.406	27.996	49.122	1.00	29.23	AAAA

ATOM	3296	C	ILE	A	438	3.082	29.936	51.967	1.00	32.55	AAAA
ATOM	3297	O	ILE	A	438	3.809	30.862	52.323	1.00	32.95	AAAA
ATOM	3298	N	ILE	A	439	2.847	28.878	52.735	1.00	32.51	AAAA
ATOM	3299	CA	ILE	A	439	3.477	28.761	54.041	1.00	32.75	AAAA
ATOM	3300	CB	ILE	A	439	2.479	28.970	55.156	1.00	30.28	AAAA
ATOM	3301	CG2	ILE	A	439	3.214	29.094	56.465	1.00	27.97	AAAA
ATOM	3302	CG1	ILE	A	439	1.668	30.228	54.868	1.00	28.25	AAAA
ATOM	3303	CD1	ILE	A	439	0.709	30.591	55.932	1.00	29.49	AAAA
ATOM	3304	C	ILE	A	439	4.081	27.375	54.144	1.00	35.57	AAAA
ATOM	3305	O	ILE	A	439	3.455	26.446	54.645	1.00	37.22	AAAA
ATOM	3306	N	SER	A	440	5.314	27.248	53.662	1.00	37.77	AAAA
ATOM	3307	CA	SER	A	440	6.021	25.974	53.645	1.00	38.51	AAAA
ATOM	3308	CB	SER	A	440	6.084	25.470	52.199	1.00	39.61	AAAA
ATOM	3309	OG	SER	A	440	7.011	24.410	52.060	1.00	42.38	AAAA
ATOM	3310	C	SER	A	440	7.434	26.008	54.225	1.00	37.90	AAAA
ATOM	3311	O	SER	A	440	8.029	27.077	54.381	1.00	37.99	AAAA
ATOM	3312	N	GLY	A	441	7.953	24.819	54.542	1.00	37.13	AAAA
ATOM	3313	CA	GLY	A	441	9.310	24.676	55.057	1.00	36.43	AAAA
ATOM	3314	C	GLY	A	441	9.620	25.180	56.451	1.00	34.98	AAAA
ATOM	3315	O	GLY	A	441	10.775	25.400	56.806	1.00	34.49	AAAA
ATOM	3316	N	ASN	A	442	8.591	25.361	57.258	1.00	34.88	AAAA
ATOM	3317	CA	ASN	A	442	8.798	25.853	58.600	1.00	35.54	AAAA
ATOM	3318	CB	ASN	A	442	7.695	26.855	58.960	1.00	35.53	AAAA
ATOM	3319	CG	ASN	A	442	7.578	27.984	57.941	1.00	35.95	AAAA
ATOM	3320	OD1	ASN	A	442	8.536	28.720	57.690	1.00	34.75	AAAA
ATOM	3321	ND2	ASN	A	442	6.401	28.119	57.345	1.00	36.05	AAAA
ATOM	3322	C	ASN	A	442	8.824	24.667	59.555	1.00	36.67	AAAA
ATOM	3323	O	ASN	A	442	7.791	24.182	60.023	1.00	36.72	AAAA
ATOM	3324	N	LYS	A	443	10.041	24.197	59.800	1.00	37.21	AAAA
ATOM	3325	CA	LYS	A	443	10.340	23.073	60.677	1.00	36.36	AAAA
ATOM	3326	CB	LYS	A	443	11.756	23.267	61.212	1.00	38.46	AAAA
ATOM	3327	CG	LYS	A	443	12.193	22.401	62.378	1.00	39.32	AAAA
ATOM	3328	CD	LYS	A	443	13.223	23.171	63.226	1.00	40.78	AAAA
ATOM	3329	CE	LYS	A	443	14.347	23.779	62.366	1.00	41.65	AAAA
ATOM	3330	NZ	LYS	A	443	15.325	24.643	63.113	1.00	42.99	AAAA
ATOM	3331	C	LYS	A	443	9.365	22.850	61.833	1.00	35.56	AAAA
ATOM	3332	O	LYS	A	443	8.922	21.728	62.051	1.00	35.95	AAAA
ATOM	3333	N	ASN	A	444	9.015	23.907	62.561	1.00	34.71	AAAA
ATOM	3334	CA	ASN	A	444	8.114	23.764	63.710	1.00	33.50	AAAA
ATOM	3335	CB	ASN	A	444	8.822	24.288	64.950	1.00	32.55	AAAA
ATOM	3336	CG	ASN	A	444	10.259	23.864	65.003	1.00	34.08	AAAA
ATOM	3337	OD1	ASN	A	444	10.559	22.675	64.950	1.00	35.70	AAAA
ATOM	3338	ND2	ASN	A	444	11.166	24.832	65.104	1.00	33.88	AAAA
ATOM	3339	C	ASN	A	444	6.731	24.423	63.616	1.00	32.72	AAAA
ATOM	3340	O	ASN	A	444	5.808	24.035	64.317	1.00	32.89	AAAA
ATOM	3341	N	LEU	A	445	6.597	25.424	62.762	1.00	31.43	AAAA
ATOM	3342	CA	LEU	A	445	5.348	26.144	62.598	1.00	30.97	AAAA
ATOM	3343	CB	LEU	A	445	5.424	26.956	61.318	1.00	31.15	AAAA
ATOM	3344	CG	LEU	A	445	4.141	27.650	60.897	1.00	30.61	AAAA
ATOM	3345	CD1	LEU	A	445	3.770	28.729	61.897	1.00	31.45	AAAA
ATOM	3346	CD2	LEU	A	445	4.357	28.227	59.536	1.00	31.29	AAAA
ATOM	3347	C	LEU	A	445	4.059	25.325	62.581	1.00	32.39	AAAA
ATOM	3348	O	LEU	A	445	3.887	24.429	61.757	1.00	32.40	AAAA
ATOM	3349	N	CYS	A	446	3.143	25.662	63.481	1.00	33.27	AAAA
ATOM	3350	CA	CYS	A	446	1.854	25.000	63.559	1.00	35.69	AAAA
ATOM	3351	C	CYS	A	446	0.742	26.041	63.620	1.00	36.63	AAAA
ATOM	3352	O	CYS	A	446	0.998	27.234	63.417	1.00	38.60	AAAA
ATOM	3353	CB	CYS	A	446	1.792	24.089	64.779	1.00	39.70	AAAA
ATOM	3354	SG	CYS	A	446	2.643	22.489	64.527	1.00	47.79	AAAA
ATOM	3355	N	TYR	A	447	-0.484	25.602	63.904	1.00	35.15	AAAA
ATOM	3356	CA	TYR	A	447	-1.650	26.495	63.975	1.00	33.56	AAAA
ATOM	3357	CB	TYR	A	447	-1.422	27.689	64.922	1.00	30.69	AAAA
ATOM	3358	CG	TYR	A	447	-0.796	27.382	66.254	1.00	26.92	AAAA
ATOM	3359	CD1	TYR	A	447	0.571	27.481	66.420	1.00	29.14	AAAA
ATOM	3360	CE1	TYR	A	447	1.174	27.188	67.631	1.00	30.13	AAAA
ATOM	3361	CD2	TYR	A	447	-1.563	26.981	67.344	1.00	26.04	AAAA
ATOM	3362	CE2	TYR	A	447	-0.971	26.683	68.569	1.00	27.24	AAAA
ATOM	3363	CZ	TYR	A	447	0.408	26.789	68.699	1.00	28.35	AAAA
ATOM	3364	OH	TYR	A	447	1.059	26.497	69.869	1.00	27.10	AAAA
ATOM	3365	C	TYR	A	447	-1.940	27.054	62.589	1.00	34.49	AAAA
ATOM	3366	O	TYR	A	447	-3.099	27.243	62.211	1.00	35.61	AAAA
ATOM	3367	N	ALA	A	448	-0.859	27.315	61.852	1.00	35.23	AAAA
ATOM	3368	CA	ALA	A	448	-0.856	27.862	60.492	1.00	35.50	AAAA
ATOM	3369	CB	ALA	A	448	0.575	27.881	59.968	1.00	34.22	AAAA
ATOM	3370	C	ALA	A	448	-1.739	27.154	59.477	1.00	35.73	AAAA

ATOM	3371	O	ALA	A	448	-1.638	27.422	58.292	1.00	36.29	AAAA
ATOM	3372	N	ASN	A	449	-2.606	26.261	59.924	1.00	36.86	AAAA
ATOM	3373	CA	ASN	A	449	-3.450	25.528	59.000	1.00	37.86	AAAA
ATOM	3374	CB	ASN	A	449	-2.951	24.092	58.890	1.00	37.97	AAAA
ATOM	3375	CG	ASN	A	449	-3.117	23.523	57.502	1.00	37.39	AAAA
ATOM	3376	OD1	ASN	A	449	-2.659	24.107	56.521	1.00	38.36	AAAA
ATOM	3377	ND2	ASN	A	449	-3.762	22.372	57.412	1.00	37.99	AAAA
ATOM	3378	C	ASN	A	449	-4.857	25.534	59.532	1.00	38.97	AAAA
ATOM	3379	O	ASN	A	449	-5.809	25.156	58.854	1.00	39.70	AAAA
ATOM	3380	N	THR	A	450	-4.980	25.959	60.773	1.00	39.32	AAAA
ATOM	3381	CA	THR	A	450	-6.270	26.017	61.415	1.00	40.61	AAAA
ATOM	3382	CB	THR	A	450	-6.088	26.451	62.861	1.00	40.14	AAAA
ATOM	3383	OG1	THR	A	450	-5.651	27.811	62.884	1.00	41.30	AAAA
ATOM	3384	CG2	THR	A	450	-5.017	25.612	63.534	1.00	39.48	AAAA
ATOM	3385	C	THR	A	450	-7.111	27.055	60.670	1.00	41.64	AAAA
ATOM	3386	O	THR	A	450	-8.290	26.834	60.360	1.00	41.96	AAAA
ATOM	3387	N	ILE	A	451	-6.452	28.174	60.373	1.00	42.24	AAAA
ATOM	3388	CA	ILE	A	451	-7.015	29.342	59.693	1.00	41.34	AAAA
ATOM	3389	CB	ILE	A	451	-5.905	30.356	59.376	1.00	42.69	AAAA
ATOM	3390	CG2	ILE	A	451	-6.446	31.780	59.523	1.00	42.92	AAAA
ATOM	3391	CG1	ILE	A	451	-4.719	30.113	60.320	1.00	43.92	AAAA
ATOM	3392	CD1	ILE	A	451	-3.500	30.940	60.048	1.00	44.34	AAAA
ATOM	3393	C	ILE	A	451	-7.742	29.058	58.399	1.00	39.85	AAAA
ATOM	3394	O	ILE	A	451	-7.274	28.301	57.569	1.00	39.89	AAAA
ATOM	3395	N	ASN	A	452	-8.888	29.693	58.217	1.00	39.42	AAAA
ATOM	3396	CA	ASN	A	452	-9.664	29.505	56.997	1.00	38.45	AAAA
ATOM	3397	CB	ASN	A	452	-11.152	29.543	57.328	1.00	40.23	AAAA
ATOM	3398	CG	ASN	A	452	-12.015	29.376	56.113	1.00	43.01	AAAA
ATOM	3399	OD1	ASN	A	452	-11.518	29.101	55.016	1.00	45.00	AAAA
ATOM	3400	ND2	ASN	A	452	-13.321	29.530	56.293	1.00	44.27	AAAA
ATOM	3401	C	ASN	A	452	-9.320	30.611	56.007	1.00	36.31	AAAA
ATOM	3402	O	ASN	A	452	-10.105	31.539	55.834	1.00	35.81	AAAA
ATOM	3403	N	TRP	A	453	-8.161	30.484	55.352	1.00	34.09	AAAA
ATOM	3404	CA	TRP	A	453	-7.635	31.475	54.402	1.00	32.35	AAAA
ATOM	3405	CB	TRP	A	453	-6.336	30.967	53.775	1.00	32.16	AAAA
ATOM	3406	CG	TRP	A	453	-5.264	30.590	54.742	1.00	31.21	AAAA
ATOM	3407	CD2	TRP	A	453	-4.229	31.437	55.248	1.00	30.49	AAAA
ATOM	3408	CE2	TRP	A	453	-3.427	30.651	56.103	1.00	31.08	AAAA
ATOM	3409	CE3	TRP	A	453	-3.898	32.781	55.061	1.00	29.15	AAAA
ATOM	3410	CD1	TRP	A	453	-5.059	29.364	55.297	1.00	31.53	AAAA
ATOM	3411	NE1	TRP	A	453	-3.955	29.389	56.115	1.00	30.37	AAAA
ATOM	3412	CZ2	TRP	A	453	-2.313	31.168	56.769	1.00	30.66	AAAA
ATOM	3413	CZ3	TRP	A	453	-2.789	33.294	55.723	1.00	30.08	AAAA
ATOM	3414	CH2	TRP	A	453	-2.011	32.488	56.566	1.00	29.76	AAAA
ATOM	3415	C	TRP	A	453	-8.530	32.006	53.276	1.00	32.12	AAAA
ATOM	3416	O	TRP	A	453	-8.474	33.194	52.960	1.00	29.24	AAAA
ATOM	3417	N	LYS	A	454	-9.333	31.138	52.662	1.00	33.49	AAAA
ATOM	3418	CA	LYS	A	454	-10.225	31.556	51.575	1.00	35.03	AAAA
ATOM	3419	CB	LYS	A	454	-10.877	30.340	50.911	1.00	34.70	AAAA
ATOM	3420	CG	LYS	A	454	-9.890	29.351	50.314	0.01	34.47	AAAA
ATOM	3421	CD	LYS	A	454	-10.608	28.159	49.703	0.01	34.29	AAAA
ATOM	3422	CE	LYS	A	454	-9.625	27.165	49.109	0.01	34.18	AAAA
ATOM	3423	NZ	LYS	A	454	-10.317	25.991	48.510	0.01	34.49	AAAA
ATOM	3424	C	LYS	A	454	-11.307	32.469	52.126	1.00	36.28	AAAA
ATOM	3425	O	LYS	A	454	-12.452	32.462	51.663	1.00	37.67	AAAA
ATOM	3426	N	LYS	A	455	-10.928	33.253	53.125	1.00	35.91	AAAA
ATOM	3427	CA	LYS	A	455	-11.837	34.176	53.780	1.00	36.33	AAAA
ATOM	3428	CB	LYS	A	455	-12.326	33.579	55.105	1.00	36.66	AAAA
ATOM	3429	CG	LYS	A	455	-13.176	32.327	54.959	0.01	36.25	AAAA
ATOM	3430	CD	LYS	A	455	-14.523	32.634	54.324	0.01	36.05	AAAA
ATOM	3431	CE	LYS	A	455	-15.326	33.612	55.169	0.01	35.84	AAAA
ATOM	3432	NZ	LYS	A	455	-15.561	33.097	56.547	0.01	35.72	AAAA
ATOM	3433	C	LYS	A	455	-11.114	35.495	54.033	1.00	35.93	AAAA
ATOM	3434	O	LYS	A	455	-11.647	36.405	54.667	1.00	37.27	AAAA
ATOM	3435	N	LEU	A	456	-9.890	35.582	53.538	1.00	33.47	AAAA
ATOM	3436	CA	LEU	A	456	-9.095	36.784	53.678	1.00	32.31	AAAA
ATOM	3437	CB	LEU	A	456	-7.699	36.443	54.208	1.00	31.51	AAAA
ATOM	3438	CG	LEU	A	456	-7.466	35.741	55.546	1.00	28.94	AAAA
ATOM	3439	CD1	LEU	A	456	-6.089	35.146	55.559	1.00	27.55	AAAA
ATOM	3440	CD2	LEU	A	456	-7.605	36.717	56.676	1.00	29.29	AAAA
ATOM	3441	C	LEU	A	456	-8.958	37.287	52.254	1.00	33.32	AAAA
ATOM	3442	O	LEU	A	456	-8.446	38.382	52.010	1.00	34.35	AAAA
ATOM	3443	N	PHE	A	457	-9.422	36.462	51.316	1.00	32.64	AAAA
ATOM	3444	CA	PHE	A	457	-9.309	36.760	49.893	1.00	31.56	AAAA
ATOM	3445	CB	PHE	A	457	-9.288	35.454	49.091	1.00	30.23	AAAA

ATOM	3446	CG	PHE	A	457	-8.169	34.516	49.463	1.00	29.22	AAAA
ATOM	3447	CD1	PHE	A	457	-6.913	34.998	49.803	1.00	30.34	AAAA
ATOM	3448	CD2	PHE	A	457	-8.365	33.142	49.443	1.00	29.39	AAAA
ATOM	3449	CE1	PHE	A	457	-5.868	34.124	50.118	1.00	29.65	AAAA
ATOM	3450	CE2	PHE	A	457	-7.335	32.264	49.753	1.00	29.22	AAAA
ATOM	3451	CZ	PHE	A	457	-6.082	32.757	50.092	1.00	30.03	AAAA
ATOM	3452	C	PHE	A	457	-10.378	37.687	49.328	1.00	31.52	AAAA
ATOM	3453	O	PHE	A	457	-11.374	37.979	49.991	1.00	30.79	AAAA
ATOM	3454	N	GLY	A	458	-10.147	38.140	48.093	1.00	31.16	AAAA
ATOM	3455	CA	GLY	A	458	-11.065	39.033	47.398	1.00	30.79	AAAA
ATOM	3456	C	GLY	A	458	-11.057	38.781	45.899	1.00	30.26	AAAA
ATOM	3457	O	GLY	A	458	-12.066	38.916	45.211	1.00	31.05	AAAA
ATOM	3458	N	THR	A	459	-9.898	38.407	45.387	1.00	29.66	AAAA
ATOM	3459	CA	THR	A	459	-9.744	38.116	43.977	1.00	29.42	AAAA
ATOM	3460	CB	THR	A	459	-8.263	38.248	43.567	1.00	28.95	AAAA
ATOM	3461	OG1	THR	A	459	-7.856	39.614	43.703	1.00	26.46	AAAA
ATOM	3462	CG2	THR	A	459	-8.048	37.795	42.130	1.00	29.67	AAAA
ATOM	3463	C	THR	A	459	-10.246	36.697	43.694	1.00	30.00	AAAA
ATOM	3464	O	THR	A	459	-10.563	35.946	44.616	1.00	30.23	AAAA
ATOM	3465	N	SER	A	460	-10.339	36.347	42.418	1.00	30.26	AAAA
ATOM	3466	CA	SER	A	460	-10.794	35.030	42.012	1.00	31.41	AAAA
ATOM	3467	CB	SER	A	460	-11.775	35.148	40.832	1.00	32.22	AAAA
ATOM	3468	OG	SER	A	460	-12.262	33.882	40.402	1.00	32.60	AAAA
ATOM	3469	C	SER	A	460	-9.544	34.269	41.604	1.00	32.05	AAAA
ATOM	3470	O	SER	A	460	-8.670	34.810	40.931	1.00	32.57	AAAA
ATOM	3471	N	GLY	A	461	-9.449	33.019	42.027	1.00	32.21	AAAA
ATOM	3472	CA	GLY	A	461	-8.278	32.233	41.693	1.00	34.05	AAAA
ATOM	3473	C	GLY	A	461	-7.304	32.197	42.859	1.00	34.53	AAAA
ATOM	3474	O	GLY	A	461	-6.402	31.351	42.924	1.00	33.47	AAAA
ATOM	3475	N	GLN	A	462	-7.477	33.127	43.790	1.00	34.78	AAAA
ATOM	3476	CA	GLN	A	462	-6.598	33.154	44.935	1.00	35.20	AAAA
ATOM	3477	CB	GLN	A	462	-7.076	34.183	45.970	1.00	34.08	AAAA
ATOM	3478	CG	GLN	A	462	-6.721	35.628	45.586	1.00	32.71	AAAA
ATOM	3479	CD	GLN	A	462	-6.696	36.584	46.763	1.00	31.87	AAAA
ATOM	3480	OE1	GLN	A	462	-7.724	37.088	47.186	1.00	31.81	AAAA
ATOM	3481	NE2	GLN	A	462	-5.512	36.826	47.302	1.00	31.66	AAAA
ATOM	3482	C	GLN	A	462	-6.596	31.748	45.499	1.00	36.30	AAAA
ATOM	3483	O	GLN	A	462	-7.624	31.083	45.536	1.00	35.91	AAAA
ATOM	3484	N	LYS	A	463	-5.423	31.268	45.887	1.00	38.07	AAAA
ATOM	3485	CA	LYS	A	463	-5.332	29.928	46.438	1.00	38.50	AAAA
ATOM	3486	CB	LYS	A	463	-5.164	28.884	45.326	1.00	37.44	AAAA
ATOM	3487	CG	LYS	A	463	-3.857	28.940	44.590	1.00	39.00	AAAA
ATOM	3488	CD	LYS	A	463	-3.862	28.011	43.392	1.00	40.11	AAAA
ATOM	3489	CE	LYS	A	463	-2.595	28.196	42.567	1.00	41.03	AAAA
ATOM	3490	NZ	LYS	A	463	-2.655	27.524	41.240	1.00	42.11	AAAA
ATOM	3491	C	LYS	A	463	-4.201	29.829	47.444	1.00	38.32	AAAA
ATOM	3492	O	LYS	A	463	-3.225	30.580	47.399	1.00	37.95	AAAA
ATOM	3493	N	THR	A	464	-4.365	28.883	48.355	1.00	37.81	AAAA
ATOM	3494	CA	THR	A	464	-3.430	28.645	49.427	1.00	36.34	AAAA
ATOM	3495	CB	THR	A	464	-4.241	28.371	50.709	1.00	35.59	AAAA
ATOM	3496	OG1	THR	A	464	-4.096	29.484	51.601	1.00	34.42	AAAA
ATOM	3497	CG2	THR	A	464	-3.831	27.058	51.364	1.00	33.90	AAAA
ATOM	3498	C	THR	A	464	-2.470	27.501	49.108	1.00	36.24	AAAA
ATOM	3499	O	THR	A	464	-2.794	26.627	48.317	1.00	36.37	AAAA
ATOM	3500	N	LYS	A	465	-1.285	27.520	49.712	1.00	36.25	AAAA
ATOM	3501	CA	LYS	A	465	-0.307	26.465	49.478	1.00	37.12	AAAA
ATOM	3502	CB	LYS	A	465	0.672	26.886	48.386	1.00	36.43	AAAA
ATOM	3503	CG	LYS	A	465	0.030	27.162	47.032	0.01	36.25	AAAA
ATOM	3504	CD	LYS	A	465	-0.620	25.915	46.447	0.01	35.95	AAAA
ATOM	3505	CE	LYS	A	465	0.401	24.816	46.190	0.01	35.83	AAAA
ATOM	3506	NZ	LYS	A	465	-0.233	23.593	45.624	0.01	35.53	AAAA
ATOM	3507	C	LYS	A	465	0.486	26.030	50.711	1.00	37.50	AAAA
ATOM	3508	O	LYS	A	465	1.682	25.790	50.608	1.00	38.30	AAAA
ATOM	3509	N	ILE	A	466	-0.181	25.917	51.859	1.00	37.70	AAAA
ATOM	3510	CA	ILE	A	466	0.451	25.497	53.118	1.00	37.92	AAAA
ATOM	3511	CB	ILE	A	466	-0.529	25.656	54.323	1.00	36.78	AAAA
ATOM	3512	CG2	ILE	A	466	0.058	25.033	55.564	1.00	36.50	AAAA
ATOM	3513	CG1	ILE	A	466	-0.813	27.125	54.599	1.00	37.03	AAAA
ATOM	3514	CD1	ILE	A	466	-1.622	27.798	53.541	1.00	38.09	AAAA
ATOM	3515	C	ILE	A	466	0.912	24.029	53.086	1.00	38.09	AAAA
ATOM	3516	O	ILE	A	466	0.105	23.121	52.951	1.00	38.82	AAAA
ATOM	3517	N	ILE	A	467	2.207	23.795	53.239	1.00	38.47	AAAA
ATOM	3518	CA	ILE	A	467	2.723	22.432	53.217	1.00	39.02	AAAA
ATOM	3519	CB	ILE	A	467	2.720	21.858	51.773	1.00	38.79	AAAA
ATOM	3520	CG2	ILE	A	467	3.664	22.673	50.888	1.00	36.81	AAAA

ATOM	3521	CG1	ILE	A	467	3.170	20.393	51.777	1.00	38.02	AAAA
ATOM	3522	CD1	ILE	A	467	2.265	19.473	52.566	0.01	38.24	AAAA
ATOM	3523	C	ILE	A	467	4.149	22.359	53.758	1.00	39.47	AAAA
ATOM	3524	O	ILE	A	467	4.855	23.361	53.833	1.00	38.89	AAAA
ATOM	3525	N	SER	A	468	4.554	21.156	54.140	1.00	39.91	AAAA
ATOM	3526	CA	SER	A	468	5.885	20.897	54.659	1.00	40.96	AAAA
ATOM	3527	CB	SER	A	468	6.910	21.099	53.540	1.00	42.91	AAAA
ATOM	3528	OG	SER	A	468	8.169	20.550	53.891	1.00	45.03	AAAA
ATOM	3529	C	SER	A	468	6.288	21.711	55.892	1.00	40.32	AAAA
ATOM	3530	O	SER	A	468	7.409	22.198	55.974	1.00	40.41	AAAA
ATOM	3531	N	ASN	A	469	5.381	21.860	56.850	1.00	39.89	AAAA
ATOM	3532	CA	ASN	A	469	5.708	22.587	58.069	1.00	40.52	AAAA
ATOM	3533	CB	ASN	A	469	4.645	23.649	58.346	1.00	40.07	AAAA
ATOM	3534	CG	ASN	A	469	4.538	24.677	57.209	1.00	41.77	AAAA
ATOM	3535	OD1	ASN	A	469	5.514	25.345	56.862	1.00	41.82	AAAA
ATOM	3536	ND2	ASN	A	469	3.350	24.799	56.627	1.00	41.27	AAAA
ATOM	3537	C	ASN	A	469	5.813	21.550	59.197	1.00	42.02	AAAA
ATOM	3538	O	ASN	A	469	6.397	20.484	58.988	1.00	43.25	AAAA
ATOM	3539	N	ARG	A	470	5.281	21.811	60.387	1.00	42.14	AAAA
ATOM	3540	CA	ARG	A	470	5.407	20.785	61.418	1.00	40.43	AAAA
ATOM	3541	CB	ARG	A	470	5.355	21.379	62.824	1.00	39.77	AAAA
ATOM	3542	CG	ARG	A	470	5.799	20.392	63.913	1.00	39.14	AAAA
ATOM	3543	CD	ARG	A	470	5.368	20.892	65.261	1.00	40.19	AAAA
ATOM	3544	NE	ARG	A	470	5.909	20.135	66.377	1.00	40.49	AAAA
ATOM	3545	CZ	ARG	A	470	7.153	20.255	66.817	1.00	42.52	AAAA
ATOM	3546	NH1	ARG	A	470	7.986	21.103	66.226	1.00	41.38	AAAA
ATOM	3547	NH2	ARG	A	470	7.558	19.541	67.864	1.00	43.86	AAAA
ATOM	3548	C	ARG	A	470	4.311	19.744	61.271	1.00	40.14	AAAA
ATOM	3549	O	ARG	A	470	3.179	20.063	60.895	1.00	38.57	AAAA
ATOM	3550	N	GLY	A	471	4.659	18.499	61.578	1.00	40.23	AAAA
ATOM	3551	CA	GLY	A	471	3.709	17.410	61.468	1.00	41.41	AAAA
ATOM	3552	C	GLY	A	471	2.387	17.692	62.143	1.00	42.39	AAAA
ATOM	3553	O	GLY	A	471	2.361	18.105	63.302	1.00	43.59	AAAA
ATOM	3554	N	GLU	A	472	1.290	17.467	61.423	1.00	42.47	AAAA
ATOM	3555	CA	GLU	A	472	-0.039	17.705	61.967	1.00	42.45	AAAA
ATOM	3556	CB	GLU	A	472	-1.114	17.359	60.934	1.00	44.95	AAAA
ATOM	3557	CG	GLU	A	472	-2.542	17.580	61.433	1.00	49.05	AAAA
ATOM	3558	CD	GLU	A	472	-3.559	17.658	60.305	1.00	51.94	AAAA
ATOM	3559	OE1	GLU	A	472	-3.690	16.669	59.553	1.00	53.46	AAAA
ATOM	3560	OE2	GLU	A	472	-4.226	18.710	60.165	1.00	53.20	AAAA
ATOM	3561	C	GLU	A	472	-0.260	16.893	63.229	1.00	41.34	AAAA
ATOM	3562	O	GLU	A	472	-0.864	17.371	64.190	1.00	40.54	AAAA
ATOM	3563	N	ASN	A	473	0.243	15.665	63.229	1.00	40.78	AAAA
ATOM	3564	CA	ASN	A	473	0.090	14.798	64.384	1.00	40.52	AAAA
ATOM	3565	CB	ASN	A	473	0.245	13.333	63.972	1.00	39.35	AAAA
ATOM	3566	CG	ASN	A	473	-0.960	12.821	63.206	1.00	38.36	AAAA
ATOM	3567	OD1	ASN	A	473	-2.093	13.194	63.496	1.00	40.17	AAAA
ATOM	3568	ND2	ASN	A	473	-0.725	11.960	62.237	1.00	36.04	AAAA
ATOM	3569	C	ASN	A	473	1.048	15.138	65.513	1.00	40.48	AAAA
ATOM	3570	O	ASN	A	473	0.753	14.884	66.675	1.00	40.39	AAAA
ATOM	3571	N	SER	A	474	2.186	15.731	65.174	1.00	41.21	AAAA
ATOM	3572	CA	SER	A	474	3.172	16.114	66.179	1.00	41.74	AAAA
ATOM	3573	CB	SER	A	474	4.490	16.517	65.520	1.00	42.75	AAAA
ATOM	3574	OG	SER	A	474	5.458	16.877	66.493	1.00	42.97	AAAA
ATOM	3575	C	SER	A	474	2.709	17.267	67.056	1.00	41.83	AAAA
ATOM	3576	O	SER	A	474	3.069	17.337	68.230	1.00	41.31	AAAA
ATOM	3577	N	CYS	A	475	1.929	18.182	66.490	1.00	42.28	AAAA
ATOM	3578	CA	CYS	A	475	1.464	19.316	67.272	1.00	43.71	AAAA
ATOM	3579	C	CYS	A	475	0.277	19.002	68.154	1.00	43.43	AAAA
ATOM	3580	O	CYS	A	475	0.045	19.683	69.149	1.00	42.98	AAAA
ATOM	3581	CB	CYS	A	475	1.183	20.531	66.376	1.00	45.39	AAAA
ATOM	3582	SG	CYS	A	475	2.638	21.638	66.358	1.00	48.66	AAAA
ATOM	3583	N	LYS	A	476	-0.469	17.964	67.799	1.00	44.54	AAAA
ATOM	3584	CA	LYS	A	476	-1.604	17.554	68.611	1.00	44.92	AAAA
ATOM	3585	CB	LYS	A	476	-2.564	16.669	67.805	1.00	46.30	AAAA
ATOM	3586	CG	LYS	A	476	-3.308	17.420	66.695	1.00	49.77	AAAA
ATOM	3587	CD	LYS	A	476	-4.469	16.612	66.105	1.00	50.88	AAAA
ATOM	3588	CE	LYS	A	476	-5.565	16.334	67.136	1.00	52.46	AAAA
ATOM	3589	NZ	LYS	A	476	-6.234	17.567	67.657	1.00	52.22	AAAA
ATOM	3590	C	LYS	A	476	-1.021	16.784	69.785	1.00	43.70	AAAA
ATOM	3591	O	LYS	A	476	-1.484	16.898	70.913	1.00	42.62	AAAA
ATOM	3592	N	ALA	A	477	0.020	16.010	69.508	1.00	43.91	AAAA
ATOM	3593	CA	ALA	A	477	0.684	15.228	70.541	1.00	45.19	AAAA
ATOM	3594	CB	ALA	A	477	1.651	14.245	69.900	1.00	43.98	AAAA
ATOM	3595	C	ALA	A	477	1.429	16.156	71.508	1.00	46.04	AAAA

ATOM	3596	O	ALA	A	477	1.997	15.708	72.510	1.00	46.47	AAAA
ATOM	3597	N	THR	A	478	1.413	17.452	71.201	1.00	45.95	AAAA
ATOM	3598	CA	THR	A	478	2.079	18.455	72.022	1.00	45.97	AAAA
ATOM	3599	CB	THR	A	478	3.194	19.139	71.235	1.00	47.35	AAAA
ATOM	3600	OG1	THR	A	478	2.667	19.624	69.994	1.00	48.29	AAAA
ATOM	3601	CG2	THR	A	478	4.331	18.158	70.958	1.00	48.15	AAAA
ATOM	3602	C	THR	A	478	1.096	19.516	72.504	1.00	45.78	AAAA
ATOM	3603	O	THR	A	478	1.472	20.456	73.206	1.00	45.48	AAAA
ATOM	3604	N	GLY	A	479	-0.165	19.361	72.114	1.00	45.51	AAAA
ATOM	3605	CA	GLY	A	479	-1.198	20.293	72.529	1.00	45.02	AAAA
ATOM	3606	C	GLY	A	479	-1.161	21.628	71.821	1.00	44.38	AAAA
ATOM	3607	O	GLY	A	479	-1.964	22.517	72.093	1.00	44.00	AAAA
ATOM	3608	N	GLN	A	480	-0.216	21.789	70.914	1.00	44.26	AAAA
ATOM	3609	CA	GLN	A	480	-0.141	23.033	70.194	1.00	44.70	AAAA
ATOM	3610	CB	GLN	A	480	1.174	23.123	69.453	1.00	43.41	AAAA
ATOM	3611	CG	GLN	A	480	2.238	23.726	70.313	1.00	45.41	AAAA
ATOM	3612	CD	GLN	A	480	3.593	23.181	69.997	1.00	46.61	AAAA
ATOM	3613	OE1	GLN	A	480	3.837	21.989	70.165	1.00	47.52	AAAA
ATOM	3614	NE2	GLN	A	480	4.493	24.045	69.536	1.00	46.03	AAAA
ATOM	3615	C	GLN	A	480	-1.307	23.130	69.242	1.00	45.62	AAAA
ATOM	3616	O	GLN	A	480	-1.143	23.029	68.034	1.00	47.24	AAAA
ATOM	3617	N	VAL	A	481	-2.495	23.297	69.806	1.00	45.94	AAAA
ATOM	3618	CA	VAL	A	481	-3.717	23.438	69.031	1.00	46.55	AAAA
ATOM	3619	CB	VAL	A	481	-4.674	22.262	69.254	1.00	47.01	AAAA
ATOM	3620	CG1	VAL	A	481	-4.101	21.009	68.630	1.00	48.04	AAAA
ATOM	3621	CG2	VAL	A	481	-4.911	22.060	70.745	1.00	46.70	AAAA
ATOM	3622	C	VAL	A	481	-4.395	24.710	69.507	1.00	47.11	AAAA
ATOM	3623	O	VAL	A	481	-4.158	25.160	70.626	1.00	47.18	AAAA
ATOM	3624	N	CYS	A	482	-5.240	25.290	68.668	1.00	47.72	AAAA
ATOM	3625	CA	CYS	A	482	-5.923	26.521	69.035	1.00	49.35	AAAA
ATOM	3626	C	CYS	A	482	-6.569	26.453	70.421	1.00	50.08	AAAA
ATOM	3627	O	CYS	A	482	-7.290	25.513	70.726	1.00	50.90	AAAA
ATOM	3628	CB	CYS	A	482	-6.958	26.867	67.969	1.00	48.77	AAAA
ATOM	3629	SG	CYS	A	482	-6.204	27.303	66.371	1.00	47.60	AAAA
ATOM	3630	N	HIS	A	483	-6.301	27.452	71.257	1.00	50.64	AAAA
ATOM	3631	CA	HIS	A	483	-6.846	27.480	72.610	1.00	52.07	AAAA
ATOM	3632	CB	HIS	A	483	-6.555	28.834	73.266	1.00	51.72	AAAA
ATOM	3633	CG	HIS	A	483	-6.993	28.923	74.696	0.01	51.67	AAAA
ATOM	3634	CD2	HIS	A	483	-6.284	29.103	75.835	0.01	51.51	AAAA
ATOM	3635	ND1	HIS	A	483	-8.313	28.821	75.079	0.01	51.49	AAAA
ATOM	3636	CE1	HIS	A	483	-8.399	28.935	76.392	0.01	51.54	AAAA
ATOM	3637	NE2	HIS	A	483	-7.182	29.107	76.875	0.01	51.54	AAAA
ATOM	3638	C	HIS	A	483	-8.348	27.201	72.632	1.00	52.81	AAAA
ATOM	3639	O	HIS	A	483	-9.064	27.535	71.690	1.00	52.72	AAAA
ATOM	3640	N	ALA	A	484	-8.811	26.583	73.718	1.00	53.64	AAAA
ATOM	3641	CA	ALA	A	484	-10.220	26.245	73.898	1.00	54.13	AAAA
ATOM	3642	CB	ALA	A	484	-10.396	25.458	75.177	1.00	53.89	AAAA
ATOM	3643	C	ALA	A	484	-11.090	27.490	73.938	1.00	55.36	AAAA
ATOM	3644	O	ALA	A	484	-11.170	28.165	74.965	1.00	54.99	AAAA
ATOM	3645	N	LEU	A	485	-11.741	27.782	72.815	1.00	57.00	AAAA
ATOM	3646	CA	LEU	A	485	-12.614	28.952	72.682	1.00	58.61	AAAA
ATOM	3647	CB	LEU	A	485	-11.905	30.211	73.210	1.00	58.09	AAAA
ATOM	3648	CG	LEU	A	485	-12.725	31.482	73.464	0.01	58.18	AAAA
ATOM	3649	CD1	LEU	A	485	-11.856	32.495	74.192	0.01	58.09	AAAA
ATOM	3650	CD2	LEU	A	485	-13.241	32.063	72.158	0.01	58.08	AAAA
ATOM	3651	C	LEU	A	485	-12.950	29.145	71.205	1.00	59.34	AAAA
ATOM	3652	O	LEU	A	485	-13.959	28.641	70.705	1.00	60.33	AAAA
ATOM	3653	N	CYS	A	486	-12.065	29.885	70.540	1.00	59.08	AAAA
ATOM	3654	CA	CYS	A	486	-12.095	30.244	69.120	1.00	58.26	AAAA
ATOM	3655	C	CYS	A	486	-12.813	29.262	68.193	1.00	58.06	AAAA
ATOM	3656	O	CYS	A	486	-12.186	28.478	67.492	1.00	58.68	AAAA
ATOM	3657	CB	CYS	A	486	-10.638	30.444	68.704	1.00	57.73	AAAA
ATOM	3658	SG	CYS	A	486	-9.702	30.787	70.229	1.00	57.63	AAAA
ATOM	3659	N	SER	A	487	-14.137	29.331	68.173	1.00	58.49	AAAA
ATOM	3660	CA	SER	A	487	-14.945	28.432	67.350	1.00	59.92	AAAA
ATOM	3661	CB	SER	A	487	-16.428	28.567	67.733	1.00	60.61	AAAA
ATOM	3662	OG	SER	A	487	-16.879	29.912	67.654	1.00	60.79	AAAA
ATOM	3663	C	SER	A	487	-14.803	28.592	65.837	1.00	60.28	AAAA
ATOM	3664	O	SER	A	487	-14.890	27.609	65.090	1.00	59.82	AAAA
ATOM	3665	N	PRO	A	488	-14.589	29.831	65.360	1.00	60.62	AAAA
ATOM	3666	CD	PRO	A	488	-14.443	31.104	66.094	1.00	60.88	AAAA
ATOM	3667	CA	PRO	A	488	-14.451	30.055	63.918	1.00	60.37	AAAA
ATOM	3668	CB	PRO	A	488	-14.551	31.574	63.802	1.00	60.64	AAAA
ATOM	3669	CG	PRO	A	488	-13.859	32.026	65.035	1.00	60.46	AAAA
ATOM	3670	C	PRO	A	488	-13.149	29.537	63.339	1.00	59.45	AAAA

ATOM	3671	O	PRO	A	488	-12.725	28.410	63.600	1.00	58.16	AAAA
ATOM	3672	N	GLU	A	489	-12.535	30.392	62.535	1.00	59.56	AAAA
ATOM	3673	CA	GLU	A	489	-11.269	30.099	61.900	1.00	59.98	AAAA
ATOM	3674	CB	GLU	A	489	-10.870	31.266	61.000	1.00	61.61	AAAA
ATOM	3675	CG	GLU	A	489	-11.728	31.427	59.738	1.00	64.90	AAAA
ATOM	3676	CD	GLU	A	489	-13.178	30.966	59.904	1.00	66.41	AAAA
ATOM	3677	OE1	GLU	A	489	-13.886	31.466	60.807	1.00	66.57	AAAA
ATOM	3678	OE2	GLU	A	489	-13.610	30.097	59.115	1.00	66.81	AAAA
ATOM	3679	C	GLU	A	489	-10.258	29.913	63.021	1.00	59.06	AAAA
ATOM	3680	O	GLU	A	489	-10.252	30.668	63.997	1.00	59.68	AAAA
ATOM	3681	N	GLY	A	490	-9.414	28.897	62.869	1.00	57.33	AAAA
ATOM	3682	CA	GLY	A	490	-8.406	28.560	63.860	1.00	52.98	AAAA
ATOM	3683	C	GLY	A	490	-7.843	29.623	64.784	1.00	49.98	AAAA
ATOM	3684	O	GLY	A	490	-8.530	30.167	65.645	1.00	49.15	AAAA
ATOM	3685	N	CYS	A	491	-6.563	29.908	64.598	1.00	47.32	AAAA
ATOM	3686	CA	CYS	A	491	-5.865	30.866	65.425	1.00	44.67	AAAA
ATOM	3687	C	CYS	A	491	-4.501	31.082	64.812	1.00	43.67	AAAA
ATOM	3688	O	CYS	A	491	-4.130	30.394	63.864	1.00	42.66	AAAA
ATOM	3689	CB	CYS	A	491	-5.695	30.285	66.814	1.00	45.50	AAAA
ATOM	3690	SG	CYS	A	491	-4.799	28.695	66.829	1.00	45.74	AAAA
ATOM	3691	N	TRP	A	492	-3.753	32.036	65.357	1.00	42.25	AAAA
ATOM	3692	CA	TRP	A	492	-2.409	32.322	64.867	1.00	40.51	AAAA
ATOM	3693	CB	TRP	A	492	-2.250	33.817	64.596	1.00	38.02	AAAA
ATOM	3694	CG	TRP	A	492	-3.260	34.308	63.619	1.00	36.85	AAAA
ATOM	3695	CD2	TRP	A	492	-3.164	34.257	62.190	1.00	35.98	AAAA
ATOM	3696	CE2	TRP	A	492	-4.378	34.743	61.675	1.00	35.57	AAAA
ATOM	3697	CE3	TRP	A	492	-2.167	33.844	61.297	1.00	35.55	AAAA
ATOM	3698	CD1	TRP	A	492	-4.491	34.811	63.901	1.00	35.69	AAAA
ATOM	3699	NE1	TRP	A	492	-5.170	35.076	62.741	1.00	36.04	AAAA
ATOM	3700	CZ2	TRP	A	492	-4.627	34.826	60.303	1.00	35.05	AAAA
ATOM	3701	CZ3	TRP	A	492	-2.413	33.928	59.938	1.00	35.74	AAAA
ATOM	3702	CH2	TRP	A	492	-3.635	34.416	59.454	1.00	35.27	AAAA
ATOM	3703	C	TRP	A	492	-1.384	31.858	65.882	1.00	40.22	AAAA
ATOM	3704	O	TRP	A	492	-0.176	31.942	65.650	1.00	39.75	AAAA
ATOM	3705	N	GLY	A	493	-1.892	31.354	67.004	1.00	40.45	AAAA
ATOM	3706	CA	GLY	A	493	-1.047	30.870	68.080	1.00	40.67	AAAA
ATOM	3707	C	GLY	A	493	-1.849	30.241	69.208	1.00	40.56	AAAA
ATOM	3708	O	GLY	A	493	-3.086	30.282	69.203	1.00	40.87	AAAA
ATOM	3709	N	PRO	A	494	-1.166	29.650	70.199	1.00	39.06	AAAA
ATOM	3710	CD	PRO	A	494	0.298	29.603	70.317	1.00	38.08	AAAA
ATOM	3711	CA	PRO	A	494	-1.794	28.999	71.350	1.00	38.40	AAAA
ATOM	3712	CB	PRO	A	494	-0.629	28.297	72.018	1.00	38.53	AAAA
ATOM	3713	CG	PRO	A	494	0.480	29.255	71.770	1.00	39.26	AAAA
ATOM	3714	C	PRO	A	494	-2.481	29.970	72.288	1.00	37.76	AAAA
ATOM	3715	O	PRO	A	494	-3.552	29.666	72.804	1.00	38.01	AAAA
ATOM	3716	N	GLU	A	495	-1.866	31.132	72.510	1.00	37.46	AAAA
ATOM	3717	CA	GLU	A	495	-2.447	32.141	73.397	1.00	36.79	AAAA
ATOM	3718	CB	GLU	A	495	-1.668	33.483	73.330	1.00	33.94	AAAA
ATOM	3719	CG	GLU	A	495	-0.162	33.431	73.651	1.00	33.78	AAAA
ATOM	3720	CD	GLU	A	495	0.491	34.823	73.855	1.00	34.18	AAAA
ATOM	3721	OE1	GLU	A	495	1.690	35.000	73.576	1.00	33.62	AAAA
ATOM	3722	OE2	GLU	A	495	-0.171	35.755	74.320	1.00	34.25	AAAA
ATOM	3723	C	GLU	A	495	-3.915	32.381	72.999	1.00	37.59	AAAA
ATOM	3724	O	GLU	A	495	-4.344	32.045	71.886	1.00	36.83	AAAA
ATOM	3725	N	PRO	A	496	-4.716	32.936	73.922	1.00	38.38	AAAA
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ATOM	3729	CG	PRO	A	496	-5.578	34.051	75.749	1.00	38.24	AAAA
ATOM	3730	C	PRO	A	496	-6.277	34.421	72.693	1.00	39.12	AAAA
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ATOM	3732	N	ARG	A	497	-5.231	35.239	72.603	1.00	38.86	AAAA
ATOM	3733	CA	ARG	A	497	-5.232	36.402	71.716	1.00	38.40	AAAA
ATOM	3734	CB	ARG	A	497	-4.357	37.535	72.280	1.00	38.17	AAAA
ATOM	3735	CG	ARG	A	497	-4.493	37.815	73.784	1.00	37.89	AAAA
ATOM	3736	CD	ARG	A	497	-3.438	37.056	74.592	1.00	37.21	AAAA
ATOM	3737	NE	ARG	A	497	-2.090	37.195	74.021	1.00	38.42	AAAA
ATOM	3738	CZ	ARG	A	497	-1.154	38.061	74.418	1.00	37.76	AAAA
ATOM	3739	NH1	ARG	A	497	-1.383	38.905	75.409	1.00	37.66	AAAA
ATOM	3740	NH2	ARG	A	497	0.032	38.068	73.822	1.00	36.38	AAAA
ATOM	3741	C	ARG	A	497	-4.650	35.919	70.377	1.00	38.98	AAAA
ATOM	3742	O	ARG	A	497	-5.108	36.314	69.302	1.00	39.33	AAAA
ATOM	3743	N	ASP	A	498	-3.632	35.057	70.456	1.00	38.64	AAAA
ATOM	3744	CA	ASP	A	498	-3.001	34.483	69.270	1.00	36.55	AAAA
ATOM	3745	CB	ASP	A	498	-1.848	33.476	69.676	1.00	26.46	AAAA

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ATOM	3747	OD1	ASP	A	498	-0.394	35.401	69.937	1.00	20.94	AAAA
ATOM	3748	OD2	ASP	A	498	0.563	33.576	70.323	1.00	6.51	AAAA
ATOM	3749	C	ASP	A	498	-4.180	33.800	68.507	1.00	40.77	AAAA
ATOM	3750	O	ASP	A	498	-3.990	33.182	67.464	1.00	42.22	AAAA
ATOM	3751	N	CYS	A	499	-5.408	33.958	69.017	1.00	44.60	AAAA
ATOM	3752	CA	CYS	A	499	-6.611	33.361	68.403	1.00	49.64	AAAA
ATOM	3753	C	CYS	A	499	-7.350	34.199	67.354	1.00	51.40	AAAA
ATOM	3754	O	CYS	A	499	-6.872	35.249	66.928	1.00	51.92	AAAA
ATOM	3755	CB	CYS	A	499	-7.631	32.934	69.484	1.00	51.72	AAAA
ATOM	3756	SG	CYS	A	499	-7.777	31.125	69.713	1.00	57.35	AAAA
ATOM	3757	N	VAL	A	500	-8.525	33.705	66.953	1.00	53.22	AAAA
ATOM	3758	CA	VAL	A	500	-9.382	34.332	65.948	1.00	54.64	AAAA
ATOM	3759	CB	VAL	A	500	-8.958	33.924	64.530	1.00	53.93	AAAA
ATOM	3760	CG1	VAL	A	500	-10.071	34.208	63.539	1.00	53.29	AAAA
ATOM	3761	CG2	VAL	A	500	-7.723	34.677	64.136	1.00	54.34	AAAA
ATOM	3762	C	VAL	A	500	-10.855	33.950	66.116	1.00	57.63	AAAA
ATOM	3763	O	VAL	A	500	-11.195	32.775	66.296	1.00	56.46	AAAA
ATOM	3764	N	SER	A	501	-11.720	34.959	66.036	1.00	60.93	AAAA
ATOM	3765	CA	SER	A	501	-13.168	34.788	66.159	1.00	63.49	AAAA
ATOM	3766	CB	SER	A	501	-13.548	34.462	67.609	1.00	62.82	AAAA
ATOM	3767	OG	SER	A	501	-12.972	33.238	68.031	0.01	62.91	AAAA
ATOM	3768	C	SER	A	501	-13.866	36.080	65.712	1.00	65.49	AAAA
ATOM	3769	O	SER	A	501	-13.260	36.907	65.021	1.00	66.21	AAAA
ATOM	3770	N	ALA	A	502	-15.131	36.238	66.108	1.00	66.84	AAAA
ATOM	3771	CA	ALA	A	502	-15.949	37.417	65.788	1.00	67.74	AAAA
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ATOM	3773	C	ALA	A	502	-17.430	37.053	65.650	1.00	68.67	AAAA
ATOM	3774	O	ALA	A	502	-17.779	35.867	65.846	1.00	69.66	AAAA
ATOM	3775	OXT	ALA	A	502	-18.229	37.963	65.345	1.00	69.23	AAAA
ATOM	3776	CB	LEU	B	1	1.919	84.727	27.793	1.00	53.36	BBBB
ATOM	3777	CG	LEU	B	1	3.216	84.273	28.484	1.00	54.82	BBBB
ATOM	3778	CD1	LEU	B	1	2.904	83.604	29.824	1.00	54.60	BBBB
ATOM	3779	CD2	LEU	B	1	3.953	83.299	27.596	1.00	55.41	BBBB
ATOM	3780	C	LEU	B	1	0.582	85.650	25.886	1.00	52.59	BBBB
ATOM	3781	O	LEU	B	1	-0.170	84.944	25.218	1.00	53.14	BBBB
ATOM	3782	N	LEU	B	1	2.958	86.210	26.088	1.00	51.16	BBBB
ATOM	3783	CA	LEU	B	1	1.951	85.141	26.313	1.00	52.33	BBBB
ATOM	3784	N	ALA	B	2	0.267	86.878	26.290	1.00	52.82	BBBB
ATOM	3785	CA	ALA	B	2	-0.995	87.540	25.947	1.00	52.16	BBBB
ATOM	3786	CB	ALA	B	2	-1.677	88.062	27.208	1.00	53.00	BBBB
ATOM	3787	C	ALA	B	2	-0.614	88.703	25.026	1.00	51.80	BBBB
ATOM	3788	O	ALA	B	2	-0.629	89.875	25.430	1.00	51.59	BBBB
ATOM	3789	N	GLU	B	3	-0.281	88.352	23.785	1.00	50.43	BBBB
ATOM	3790	CA	GLU	B	3	0.179	89.291	22.763	1.00	48.40	BBBB
ATOM	3791	CB	GLU	B	3	0.531	88.498	21.491	1.00	46.41	BBBB
ATOM	3792	CG	GLU	B	3	1.484	87.338	21.732	0.01	46.86	BBBB
ATOM	3793	CD	GLU	B	3	1.620	86.433	20.523	0.01	46.60	BBBB
ATOM	3794	OE1	GLU	B	3	2.067	86.917	19.461	0.01	46.78	BBBB
ATOM	3795	OE2	GLU	B	3	1.280	85.236	20.636	0.01	46.80	BBBB
ATOM	3796	C	GLU	B	3	-0.675	90.523	22.387	1.00	46.90	BBBB
ATOM	3797	O	GLU	B	3	-0.149	91.637	22.312	1.00	47.41	BBBB
ATOM	3798	N	LYS	B	4	-1.976	90.352	22.180	1.00	43.74	BBBB
ATOM	3799	CA	LYS	B	4	-2.793	91.476	21.743	1.00	40.61	BBBB
ATOM	3800	CB	LYS	B	4	-3.747	90.992	20.645	1.00	42.30	BBBB
ATOM	3801	CG	LYS	B	4	-3.088	90.094	19.586	1.00	42.15	BBBB
ATOM	3802	CD	LYS	B	4	-1.879	90.756	18.941	0.01	42.11	BBBB
ATOM	3803	CE	LYS	B	4	-1.191	89.818	17.960	0.01	42.16	BBBB
ATOM	3804	NZ	LYS	B	4	0.027	90.429	17.358	0.01	42.32	BBBB
ATOM	3805	C	LYS	B	4	-3.577	92.262	22.788	1.00	38.21	BBBB
ATOM	3806	O	LYS	B	4	-3.640	91.883	23.946	1.00	36.96	BBBB
ATOM	3807	N	LYS	B	5	-4.166	93.373	22.344	1.00	36.76	BBBB
ATOM	3808	CA	LYS	B	5	-4.983	94.268	23.176	1.00	35.51	BBBB
ATOM	3809	CB	LYS	B	5	-4.753	95.723	22.766	1.00	34.71	BBBB
ATOM	3810	CG	LYS	B	5	-3.305	96.181	22.836	0.01	34.80	BBBB
ATOM	3811	CD	LYS	B	5	-3.169	97.621	22.364	0.01	34.61	BBBB
ATOM	3812	CE	LYS	B	5	-1.725	98.091	22.415	0.01	34.54	BBBB
ATOM	3813	NZ	LYS	B	5	-1.579	99.498	21.948	0.01	34.38	BBBB
ATOM	3814	C	LYS	B	5	-6.453	93.935	22.943	1.00	35.09	BBBB
ATOM	3815	O	LYS	B	5	-6.956	94.153	21.846	1.00	35.64	BBBB
ATOM	3816	N	VAL	B	6	-7.152	93.435	23.956	1.00	33.89	BBBB
ATOM	3817	CA	VAL	B	6	-8.554	93.062	23.775	1.00	34.07	BBBB
ATOM	3818	CB	VAL	B	6	-8.999	92.056	24.835	1.00	34.32	BBBB
ATOM	3819	CG1	VAL	B	6	-8.745	90.642	24.355	1.00	34.72	BBBB
ATOM	3820	CG2	VAL	B	6	-8.240	92.310	26.112	1.00	35.92	BBBB

ATOM	3821	C	VAL	B	6	-9.578	94.185	23.760	1.00	33.85	BBBB
ATOM	3822	O	VAL	B	6	-9.287	95.308	24.168	1.00	34.65	BBBB
ATOM	3823	N	CYS	B	7	-10.769	93.850	23.253	1.00	32.70	BBBB
ATOM	3824	CA	CYS	B	7	-11.939	94.737	23.155	1.00	29.92	BBBB
ATOM	3825	C	CYS	B	7	-13.181	93.865	23.177	1.00	28.64	BBBB
ATOM	3826	O	CYS	B	7	-13.219	92.794	22.581	1.00	26.76	BBBB
ATOM	3827	CB	CYS	B	7	-11.969	95.600	21.859	1.00	29.10	BBBB
ATOM	3828	SG	CYS	B	7	-11.325	94.847	20.325	1.00	31.71	BBBB
ATOM	3829	N	GLN	B	8	-14.184	94.316	23.910	1.00	29.59	BBBB
ATOM	3830	CA	GLN	B	8	-15.450	93.619	23.985	1.00	28.75	BBBB
ATOM	3831	CB	GLN	B	8	-16.321	94.226	25.091	1.00	25.47	BBBB
ATOM	3832	CG	GLN	B	8	-17.130	93.235	25.901	1.00	24.87	BBBB
ATOM	3833	CD	GLN	B	8	-16.237	92.348	26.725	1.00	24.75	BBBB
ATOM	3834	OE1	GLN	B	8	-15.113	92.727	27.038	1.00	26.08	BBBB
ATOM	3835	NE2	GLN	B	8	-16.721	91.170	27.088	1.00	23.95	BBBB
ATOM	3836	C	GLN	B	8	-15.999	94.055	22.648	1.00	30.32	BBBB
ATOM	3837	O	GLN	B	8	-15.888	95.226	22.307	1.00	31.06	BBBB
ATOM	3838	N	GLY	B	9	-16.550	93.151	21.857	1.00	31.46	BBBB
ATOM	3839	CA	GLY	B	9	-17.110	93.620	20.602	1.00	33.02	BBBB
ATOM	3840	C	GLY	B	9	-18.491	94.165	20.927	1.00	33.15	BBBB
ATOM	3841	O	GLY	B	9	-18.746	94.617	22.049	1.00	32.68	BBBB
ATOM	3842	N	THR	B	10	-19.392	94.139	19.958	1.00	33.19	BBBB
ATOM	3843	CA	THR	B	10	-20.750	94.591	20.219	1.00	33.01	BBBB
ATOM	3844	CB	THR	B	10	-21.101	95.921	19.483	1.00	32.03	BBBB
ATOM	3845	OG1	THR	B	10	-20.808	95.819	18.081	1.00	30.99	BBBB
ATOM	3846	CG2	THR	B	10	-20.310	97.069	20.096	1.00	31.25	BBBB
ATOM	3847	C	THR	B	10	-21.676	93.475	19.795	1.00	32.99	BBBB
ATOM	3848	O	THR	B	10	-21.222	92.394	19.429	1.00	33.57	BBBB
ATOM	3849	N	SER	B	11	-22.970	93.718	19.896	1.00	33.77	BBBB
ATOM	3850	CA	SER	B	11	-23.962	92.734	19.508	1.00	35.30	BBBB
ATOM	3851	CB	SER	B	11	-23.994	91.574	20.502	1.00	35.85	BBBB
ATOM	3852	OG	SER	B	11	-22.865	90.728	20.314	1.00	37.56	BBBB
ATOM	3853	C	SER	B	11	-25.303	93.426	19.436	1.00	35.19	BBBB
ATOM	3854	O	SER	B	11	-26.208	93.155	20.215	1.00	35.84	BBBB
ATOM	3855	N	ASN	B	12	-25.402	94.344	18.486	1.00	35.44	BBBB
ATOM	3856	CA	ASN	B	12	-26.608	95.116	18.276	1.00	36.31	BBBB
ATOM	3857	CB	ASN	B	12	-26.279	96.609	18.235	1.00	36.50	BBBB
ATOM	3858	CG	ASN	B	12	-25.450	97.051	19.419	1.00	35.36	BBBB
ATOM	3859	OD1	ASN	B	12	-25.719	96.661	20.551	1.00	33.05	BBBB
ATOM	3860	ND2	ASN	B	12	-24.440	97.877	19.163	1.00	34.37	BBBB
ATOM	3861	C	ASN	B	12	-27.225	94.697	16.962	1.00	35.56	BBBB
ATOM	3862	O	ASN	B	12	-28.360	95.049	16.667	1.00	35.59	BBBB
ATOM	3863	N	LYS	B	13	-26.468	93.941	16.175	1.00	34.39	BBBB
ATOM	3864	CA	LYS	B	13	-26.963	93.474	14.891	1.00	33.45	BBBB
ATOM	3865	CB	LYS	B	13	-28.254	92.696	15.094	1.00	33.99	BBBB
ATOM	3866	CG	LYS	B	13	-28.144	91.603	16.134	1.00	34.22	BBBB
ATOM	3867	CD	LYS	B	13	-27.304	90.467	15.638	1.00	34.54	BBBB
ATOM	3868	CE	LYS	B	13	-28.078	89.168	15.762	1.00	37.14	BBBB
ATOM	3869	NZ	LYS	B	13	-29.429	89.250	15.121	1.00	38.18	BBBB
ATOM	3870	C	LYS	B	13	-27.224	94.662	13.978	1.00	32.72	BBBB
ATOM	3871	O	LYS	B	13	-26.336	95.489	13.747	1.00	33.97	BBBB
ATOM	3872	N	LEU	B	14	-28.447	94.778	13.477	1.00	30.20	BBBB
ATOM	3873	CA	LEU	B	14	-28.742	95.883	12.584	1.00	29.73	BBBB
ATOM	3874	CB	LEU	B	14	-29.520	95.379	11.377	1.00	26.91	BBBB
ATOM	3875	CG	LEU	B	14	-28.874	94.364	10.441	1.00	25.95	BBBB
ATOM	3876	CD1	LEU	B	14	-29.501	94.565	9.091	1.00	27.81	BBBB
ATOM	3877	CD2	LEU	B	14	-27.384	94.542	10.319	1.00	26.44	BBBB
ATOM	3878	C	LEU	B	14	-29.463	97.102	13.156	1.00	30.62	BBBB
ATOM	3879	O	LEU	B	14	-30.250	97.729	12.455	1.00	33.95	BBBB
ATOM	3880	N	THR	B	15	-29.191	97.470	14.404	1.00	30.53	BBBB
ATOM	3881	CA	THR	B	15	-29.857	98.630	14.989	1.00	28.45	BBBB
ATOM	3882	CB	THR	B	15	-30.435	98.338	16.361	1.00	26.58	BBBB
ATOM	3883	OG1	THR	B	15	-29.425	98.550	17.343	1.00	29.12	BBBB
ATOM	3884	CG2	THR	B	15	-30.933	96.914	16.436	1.00	24.36	BBBB
ATOM	3885	C	THR	B	15	-28.910	99.801	15.129	1.00	28.12	BBBB
ATOM	3886	O	THR	B	15	-27.700	99.640	15.049	1.00	27.23	BBBB
ATOM	3887	N	GLN	B	16	-29.486	100.976	15.358	1.00	29.08	BBBB
ATOM	3888	CA	GLN	B	16	-28.731	102.220	15.471	1.00	29.48	BBBB
ATOM	3889	CB	GLN	B	16	-29.274	103.266	14.501	1.00	32.16	BBBB
ATOM	3890	CG	GLN	B	16	-28.796	103.152	13.088	1.00	33.99	BBBB
ATOM	3891	CD	GLN	B	16	-28.938	104.462	12.375	1.00	35.94	BBBB
ATOM	3892	OE1	GLN	B	16	-30.031	105.016	12.292	1.00	38.44	BBBB
ATOM	3893	NE2	GLN	B	16	-27.832	104.979	11.864	1.00	35.49	BBBB
ATOM	3894	C	GLN	B	16	-28.665	102.881	16.830	1.00	27.79	BBBB
ATOM	3895	O	GLN	B	16	-29.679	103.146	17.475	1.00	27.32	BBBB

ATOM	3896	N	LEU	B	17	-27.447	103.188	17.237	1.00	25.33	BBBB
ATOM	3897	CA	LEU	B	17	-27.240	103.845	18.500	1.00	23.24	BBBB
ATOM	3898	CB	LEU	B	17	-25.843	103.523	19.039	1.00	20.34	BBBB
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ATOM	3902	C	LEU	B	17	-27.368	105.322	18.176	1.00	23.10	BBBB
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ATOM	3906	C	GLY	B	18	-28.628	107.660	16.307	1.00	22.60	BBBB
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ATOM	3909	CA	THR	B	19	-27.840	109.475	14.869	1.00	23.31	BBBB
ATOM	3910	CB	THR	B	19	-27.850	111.008	14.982	1.00	20.91	BBBB
ATOM	3911	OG1	THR	B	19	-26.681	111.461	15.673	1.00	19.29	BBBB
ATOM	3912	CG2	THR	B	19	-29.057	111.451	15.750	1.00	20.77	BBBB
ATOM	3913	C	THR	B	19	-26.509	109.025	14.265	1.00	25.24	BBBB
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ATOM	3917	CB	PHE	B	20	-25.101	109.157	10.819	1.00	27.98	BBBB
ATOM	3918	CG	PHE	B	20	-26.148	108.484	9.956	1.00	29.52	BBBB
ATOM	3919	CD1	PHE	B	20	-26.609	109.100	8.786	1.00	28.44	BBBB
ATOM	3920	CD2	PHE	B	20	-26.705	107.255	10.327	1.00	29.83	BBBB
ATOM	3921	CE1	PHE	B	20	-27.609	108.509	8.006	1.00	27.44	BBBB
ATOM	3922	CE2	PHE	B	20	-27.713	106.653	9.545	1.00	28.37	BBBB
ATOM	3923	CZ	PHE	B	20	-28.161	107.284	8.390	1.00	28.23	BBBB
ATOM	3924	C	PHE	B	20	-23.900	109.263	13.030	1.00	28.25	BBBB
ATOM	3925	O	PHE	B	20	-22.960	108.520	13.289	1.00	28.94	BBBB
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ATOM	3929	CG	GLU	B	21	-21.789	113.296	15.116	1.00	31.79	BBBB
ATOM	3930	CD	GLU	B	21	-20.500	113.514	14.297	1.00	32.77	BBBB
ATOM	3931	OE1	GLU	B	21	-20.585	113.629	13.062	1.00	33.34	BBBB
ATOM	3932	OE2	GLU	B	21	-19.399	113.596	14.886	1.00	32.14	BBBB
ATOM	3933	C	GLU	B	21	-22.559	110.369	15.431	1.00	30.86	BBBB
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ATOM	3935	N	ASP	B	22	-23.650	110.104	16.151	1.00	29.10	BBBB
ATOM	3936	CA	ASP	B	22	-23.543	109.402	17.428	1.00	29.07	BBBB
ATOM	3937	CB	ASP	B	22	-24.910	109.263	18.119	1.00	27.59	BBBB
ATOM	3938	CG	ASP	B	22	-25.384	110.547	18.793	1.00	28.16	BBBB
ATOM	3939	OD1	ASP	B	22	-24.541	111.340	19.260	1.00	28.39	BBBB
ATOM	3940	OD2	ASP	B	22	-26.615	110.751	18.877	1.00	26.72	BBBB
ATOM	3941	C	ASP	B	22	-23.006	107.999	17.174	1.00	30.62	BBBB
ATOM	3942	O	ASP	B	22	-21.922	107.604	17.636	1.00	29.71	BBBB
ATOM	3943	N	HIS	B	23	-23.805	107.247	16.430	1.00	31.43	BBBB
ATOM	3944	CA	HIS	B	23	-23.494	105.881	16.091	1.00	29.12	BBBB
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ATOM	3946	CG	HIS	B	23	-24.657	103.997	14.912	1.00	32.20	BBBB
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ATOM	3948	ND1	HIS	B	23	-23.689	103.021	15.021	1.00	33.27	BBBB
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ATOM	3951	C	HIS	B	23	-22.031	105.724	15.762	1.00	27.10	BBBB
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ATOM	3953	N	PHE	B	24	-21.490	106.641	14.985	1.00	25.60	BBBB
ATOM	3954	CA	PHE	B	24	-20.089	106.541	14.623	1.00	25.49	BBBB
ATOM	3955	CB	PHE	B	24	-19.750	107.557	13.534	1.00	21.94	BBBB
ATOM	3956	CG	PHE	B	24	-18.323	107.548	13.140	1.00	18.19	BBBB
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ATOM	3959	CE1	PHE	B	24	-16.478	106.515	12.002	1.00	20.70	BBBB
ATOM	3960	CE2	PHE	B	24	-16.122	108.481	13.297	1.00	20.59	BBBB
ATOM	3961	CZ	PHE	B	24	-15.625	107.487	12.491	1.00	20.77	BBBB
ATOM	3962	C	PHE	B	24	-19.162	106.757	15.823	1.00	27.60	BBBB
ATOM	3963	O	PHE	B	24	-18.118	106.111	15.938	1.00	28.03	BBBB
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ATOM	3966	CB	LEU	B	25	-19.292	109.189	18.613	1.00	26.15	BBBB
ATOM	3967	CG	LEU	B	25	-18.497	109.682	19.827	0.01	25.57	BBBB
ATOM	3968	CD1	LEU	B	25	-17.080	110.048	19.406	0.01	25.31	BBBB
ATOM	3969	CD2	LEU	B	25	-19.199	110.882	20.440	0.01	25.31	BBBB
ATOM	3970	C	LEU	B	25	-18.649	106.758	18.779	1.00	26.31	BBBB

ATOM	3971	O	LEU	B	25	-17.573	106.416	19.271	1.00	26.52	BBBB
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ATOM	3981	CG	LEU	B	27	-18.011	102.112	14.571	1.00	24.04	BBBB
ATOM	3982	CD1	LEU	B	27	-17.071	101.006	14.966	1.00	22.43	BBBB
ATOM	3983	CD2	LEU	B	27	-19.079	101.610	13.615	1.00	22.62	BBBB
ATOM	3984	C	LEU	B	27	-16.805	102.920	17.347	1.00	26.99	BBBB
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ATOM	3987	CA	GLN	B	28	-15.020	104.553	17.231	1.00	32.69	BBBB
ATOM	3988	CB	GLN	B	28	-14.842	106.025	16.880	1.00	33.16	BBBB
ATOM	3989	CG	GLN	B	28	-13.396	106.441	16.825	1.00	32.72	BBBB
ATOM	3990	CD	GLN	B	28	-13.234	107.908	16.546	1.00	33.54	BBBB
ATOM	3991	OE1	GLN	B	28	-12.139	108.367	16.248	1.00	34.63	BBBB
ATOM	3992	NE2	GLN	B	28	-14.323	108.660	16.649	1.00	31.86	BBBB
ATOM	3993	C	GLN	B	28	-14.357	104.300	18.565	1.00	33.61	BBBB
ATOM	3994	O	GLN	B	28	-13.223	103.843	18.620	1.00	33.71	BBBB
ATOM	3995	N	ARG	B	29	-15.054	104.626	19.642	1.00	34.48	BBBB
ATOM	3996	CA	ARG	B	29	-14.501	104.421	20.970	1.00	34.93	BBBB
ATOM	3997	CB	ARG	B	29	-15.443	105.012	22.024	1.00	36.92	BBBB
ATOM	3998	CG	ARG	B	29	-15.065	104.716	23.475	1.00	41.17	BBBB
ATOM	3999	CD	ARG	B	29	-15.980	105.446	24.447	1.00	43.84	BBBB
ATOM	4000	NE	ARG	B	29	-17.350	105.476	23.947	1.00	48.80	BBBB
ATOM	4001	CZ	ARG	B	29	-17.805	106.359	23.061	1.00	51.15	BBBB
ATOM	4002	NH1	ARG	B	29	-16.993	107.298	22.582	1.00	52.44	BBBB
ATOM	4003	NH2	ARG	B	29	-19.063	106.293	22.637	1.00	52.14	BBBB
ATOM	4004	C	ARG	B	29	-14.310	102.928	21.209	1.00	33.29	BBBB
ATOM	4005	O	ARG	B	29	-13.224	102.469	21.578	1.00	32.82	BBBB
ATOM	4006	N	MET	B	30	-15.374	102.173	20.984	1.00	30.23	BBBB
ATOM	4007	CA	MET	B	30	-15.321	100.746	21.189	1.00	28.48	BBBB
ATOM	4008	CB	MET	B	30	-16.583	100.094	20.625	1.00	24.81	BBBB
ATOM	4009	CG	MET	B	30	-16.562	98.570	20.609	1.00	18.87	BBBB
ATOM	4010	SD	MET	B	30	-16.271	97.870	22.242	1.00	15.53	BBBB
ATOM	4011	CE	MET	B	30	-17.939	97.726	22.879	1.00	11.94	BBBB
ATOM	4012	C	MET	B	30	-14.094	100.088	20.574	1.00	29.20	BBBB
ATOM	4013	O	MET	B	30	-13.468	99.222	21.184	1.00	29.58	BBBB
ATOM	4014	N	PHE	B	31	-13.720	100.511	19.378	1.00	29.35	BBBB
ATOM	4015	CA	PHE	B	31	-12.611	99.853	18.718	1.00	30.40	BBBB
ATOM	4016	CB	PHE	B	31	-13.059	99.417	17.319	1.00	27.67	BBBB
ATOM	4017	CG	PHE	B	31	-14.189	98.413	17.320	1.00	24.90	BBBB
ATOM	4018	CD1	PHE	B	31	-13.932	97.056	17.396	1.00	24.37	BBBB
ATOM	4019	CD2	PHE	B	31	-15.505	98.830	17.219	1.00	22.85	BBBB
ATOM	4020	CE1	PHE	B	31	-14.967	96.140	17.365	1.00	24.21	BBBB
ATOM	4021	CE2	PHE	B	31	-16.541	97.923	17.187	1.00	21.02	BBBB
ATOM	4022	CZ	PHE	B	31	-16.280	96.584	17.256	1.00	22.95	BBBB
ATOM	4023	C	PHE	B	31	-11.276	100.571	18.627	1.00	32.28	BBBB
ATOM	4024	O	PHE	B	31	-10.268	99.923	18.376	1.00	34.41	BBBB
ATOM	4025	N	ASN	B	32	-11.249	101.885	18.826	1.00	33.84	BBBB
ATOM	4026	CA	ASN	B	32	-9.995	102.621	18.726	1.00	35.06	BBBB
ATOM	4027	CB	ASN	B	32	-10.119	104.011	19.368	1.00	38.78	BBBB
ATOM	4028	CG	ASN	B	32	-8.902	104.885	19.115	1.00	42.37	BBBB
ATOM	4029	OD1	ASN	B	32	-7.937	104.435	18.512	1.00	44.20	BBBB
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ATOM	4031	C	ASN	B	32	-8.912	101.834	19.431	1.00	35.47	BBBB
ATOM	4032	O	ASN	B	32	-9.040	101.527	20.608	1.00	37.31	BBBB
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ATOM	4034	CA	ASN	B	33	-6.725	100.732	19.259	1.00	35.35	BBBB
ATOM	4035	CB	ASN	B	33	-6.253	101.418	20.547	1.00	35.26	BBBB
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ATOM	4041	N	CYS	B	34	-7.764	98.475	19.520	1.00	30.48	BBBB
ATOM	4042	CA	CYS	B	34	-7.539	97.075	19.842	1.00	30.60	BBBB
ATOM	4043	C	CYS	B	34	-6.983	96.191	18.767	1.00	30.29	BBBB
ATOM	4044	O	CYS	B	34	-7.362	96.279	17.606	1.00	31.39	BBBB
ATOM	4045	CB	CYS	B	34	-8.767	96.389	20.426	1.00	31.16	BBBB

ATOM	4046	SG	CYS	B	34	-10.272	96.335	19.441	1.00	30.50	BBBB
ATOM	4047	N	GLU	B	35	-6.058	95.336	19.195	1.00	29.44	BBBB
ATOM	4048	CA	GLU	B	35	-5.408	94.367	18.334	1.00	26.90	BBBB
ATOM	4049	CB	GLU	B	35	-3.976	93.987	18.911	1.00	23.70	BBBB
ATOM	4050	CG	GLU	B	35	-2.894	95.194	19.105	1.00	19.61	BBBB
ATOM	4051	CD	GLU	B	35	-1.381	94.758	19.364	1.00	18.98	BBBB
ATOM	4052	OE1	GLU	B	35	-1.079	93.568	19.208	1.00	21.57	BBBB
ATOM	4053	OE2	GLU	B	35	-0.473	95.574	19.697	1.00	6.51	BBBB
ATOM	4054	C	GLU	B	35	-6.405	93.146	18.231	1.00	26.17	BBBB
ATOM	4055	O	GLU	B	35	-6.411	92.439	17.226	1.00	27.74	BBBB
ATOM	4056	N	VAL	B	36	-7.296	92.947	19.216	1.00	24.39	BBBB
ATOM	4057	CA	VAL	B	36	-8.237	91.798	19.185	1.00	22.45	BBBB
ATOM	4058	CB	VAL	B	36	-7.639	90.560	19.874	1.00	21.35	BBBB
ATOM	4059	CG1	VAL	B	36	-8.707	89.485	20.015	1.00	17.39	BBBB
ATOM	4060	CG2	VAL	B	36	-6.455	90.052	19.089	1.00	19.79	BBBB
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ATOM	4062	O	VAL	B	36	-9.814	92.309	20.925	1.00	18.07	BBBB
ATOM	4063	N	VAL	B	37	-10.636	91.532	18.998	1.00	23.45	BBBB
ATOM	4064	CA	VAL	B	37	-12.044	91.598	19.390	1.00	25.22	BBBB
ATOM	4065	CB	VAL	B	37	-12.978	91.862	18.163	1.00	25.99	BBBB
ATOM	4066	CG1	VAL	B	37	-14.454	91.776	18.587	1.00	25.09	BBBB
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ATOM	4069	O	VAL	B	37	-12.698	89.286	19.405	1.00	25.52	BBBB
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ATOM	4071	CA	LEU	B	38	-13.560	89.358	22.068	1.00	26.77	BBBB
ATOM	4072	CB	LEU	B	38	-13.325	89.560	23.562	1.00	25.32	BBBB
ATOM	4073	CG	LEU	B	38	-11.874	89.463	24.028	1.00	24.63	BBBB
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ATOM	4079	CA	GLY	B	39	-17.038	88.838	20.632	1.00	30.64	BBBB
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ATOM	4081	O	GLY	B	39	-16.471	88.878	18.289	1.00	31.61	BBBB
ATOM	4082	N	ASN	B	40	-18.222	90.130	18.912	1.00	28.68	BBBB
ATOM	4083	CA	ASN	B	40	-18.493	90.554	17.536	1.00	25.31	BBBB
ATOM	4084	CB	ASN	B	40	-19.969	90.425	17.255	1.00	27.06	BBBB
ATOM	4085	CG	ASN	B	40	-20.486	89.083	17.608	1.00	30.05	BBBB
ATOM	4086	OD1	ASN	B	40	-20.014	88.069	17.089	1.00	29.61	BBBB
ATOM	4087	ND2	ASN	B	40	-21.465	89.049	18.509	1.00	32.24	BBBB
ATOM	4088	C	ASN	B	40	-18.055	91.920	17.051	1.00	22.67	BBBB
ATOM	4089	O	ASN	B	40	-18.135	92.910	17.770	1.00	20.05	BBBB
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ATOM	4091	CA	LEU	B	41	-17.177	93.166	15.139	1.00	19.05	BBBB
ATOM	4092	CB	LEU	B	41	-15.911	92.937	14.326	1.00	18.26	BBBB
ATOM	4093	CG	LEU	B	41	-15.526	94.123	13.444	1.00	16.78	BBBB
ATOM	4094	CD1	LEU	B	41	-15.679	95.394	14.232	1.00	16.21	BBBB
ATOM	4095	CD2	LEU	B	41	-14.107	93.972	12.931	1.00	16.49	BBBB
ATOM	4096	C	LEU	B	41	-18.301	93.561	14.207	1.00	19.38	BBBB
ATOM	4097	O	LEU	B	41	-18.436	92.991	13.139	1.00	18.58	BBBB
ATOM	4098	N	GLU	B	42	-19.104	94.534	14.633	1.00	20.08	BBBB
ATOM	4099	CA	GLU	B	42	-20.245	95.013	13.871	1.00	19.41	BBBB
ATOM	4100	CB	GLU	B	42	-21.504	94.959	14.730	1.00	20.31	BBBB
ATOM	4101	CG	GLU	B	42	-21.896	93.573	15.204	1.00	24.93	BBBB
ATOM	4102	CD	GLU	B	42	-23.284	93.539	15.835	1.00	28.76	BBBB
ATOM	4103	OE1	GLU	B	42	-23.995	92.523	15.662	1.00	29.63	BBBB
ATOM	4104	OE2	GLU	B	42	-23.668	94.524	16.505	1.00	29.99	BBBB
ATOM	4105	C	GLU	B	42	-20.068	96.433	13.370	1.00	17.66	BBBB
ATOM	4106	O	GLU	B	42	-20.320	97.364	14.100	1.00	18.69	BBBB
ATOM	4107	N	ILE	B	43	-19.643	96.597	12.122	1.00	17.59	BBBB
ATOM	4108	CA	ILE	B	43	-19.476	97.924	11.539	1.00	17.51	BBBB
ATOM	4109	CB	ILE	B	43	-18.246	97.990	10.645	1.00	13.50	BBBB
ATOM	4110	CG2	ILE	B	43	-18.074	99.400	10.121	1.00	8.91	BBBB
ATOM	4111	CG1	ILE	B	43	-17.032	97.502	11.433	1.00	12.43	BBBB
ATOM	4112	CD1	ILE	B	43	-15.723	97.559	10.716	1.00	11.29	BBBB
ATOM	4113	C	ILE	B	43	-20.684	98.292	10.686	1.00	19.50	BBBB
ATOM	4114	O	ILE	B	43	-20.791	97.846	9.561	1.00	20.74	BBBB
ATOM	4115	N	THR	B	44	-21.590	99.102	11.220	1.00	21.87	BBBB
ATOM	4116	CA	THR	B	44	-22.769	99.507	10.475	1.00	24.32	BBBB
ATOM	4117	CB	THR	B	44	-24.050	98.946	11.093	1.00	26.37	BBBB
ATOM	4118	OG1	THR	B	44	-24.087	99.266	12.491	1.00	29.38	BBBB
ATOM	4119	CG2	THR	B	44	-24.132	97.445	10.885	1.00	25.76	BBBB
ATOM	4120	C	THR	B	44	-22.959	101.011	10.336	1.00	24.88	BBBB

ATOM	4121	O	THR	B	44	-22.250	101.817	10.941	1.00	25.81	BBBB
ATOM	4122	N	TYR	B	45	-23.944	101.353	9.512	1.00	24.59	BBBB
ATOM	4123	CA	TYR	B	45	-24.347	102.716	9.190	1.00	23.28	BBBB
ATOM	4124	CB	TYR	B	45	-25.405	103.175	10.180	1.00	22.33	BBBB
ATOM	4125	CG	TYR	B	45	-26.551	102.210	10.311	1.00	23.06	BBBB
ATOM	4126	CD1	TYR	B	45	-26.393	101.012	10.986	1.00	23.27	BBBB
ATOM	4127	CE1	TYR	B	45	-27.449	100.123	11.117	1.00	26.08	BBBB
ATOM	4128	CD2	TYR	B	45	-27.797	102.499	9.765	1.00	22.19	BBBB
ATOM	4129	CE2	TYR	B	45	-28.860	101.623	9.887	1.00	22.61	BBBB
ATOM	4130	CZ	TYR	B	45	-28.685	100.433	10.567	1.00	25.70	BBBB
ATOM	4131	OH	TYR	B	45	-29.740	99.555	10.720	1.00	24.88	BBBB
ATOM	4132	C	TYR	B	45	-23.267	103.792	9.036	1.00	23.29	BBBB
ATOM	4133	O	TYR	B	45	-23.570	104.991	9.019	1.00	22.74	BBBB
ATOM	4134	N	VAL	B	46	-22.010	103.384	8.914	1.00	23.44	BBBB
ATOM	4135	CA	VAL	B	46	-20.964	104.372	8.717	1.00	24.86	BBBB
ATOM	4136	CB	VAL	B	46	-19.551	103.725	8.714	1.00	24.27	BBBB
ATOM	4137	CG1	VAL	B	46	-18.466	104.804	8.673	1.00	22.13	BBBB
ATOM	4138	CG2	VAL	B	46	-19.381	102.895	9.960	1.00	25.62	BBBB
ATOM	4139	C	VAL	B	46	-21.275	105.050	7.374	1.00	25.94	BBBB
ATOM	4140	O	VAL	B	46	-21.397	104.393	6.327	1.00	25.97	BBBB
ATOM	4141	N	GLN	B	47	-21.439	106.369	7.430	1.00	26.63	BBBB
ATOM	4142	CA	GLN	B	47	-21.762	107.170	6.259	1.00	27.06	BBBB
ATOM	4143	CB	GLN	B	47	-22.633	108.349	6.665	1.00	23.99	BBBB
ATOM	4144	CG	GLN	B	47	-23.942	107.941	7.275	1.00	24.28	BBBB
ATOM	4145	CD	GLN	B	47	-25.024	107.721	6.245	1.00	26.17	BBBB
ATOM	4146	OE1	GLN	B	47	-25.494	106.603	6.064	1.00	25.67	BBBB
ATOM	4147	NE2	GLN	B	47	-25.431	108.794	5.563	1.00	25.63	BBBB
ATOM	4148	C	GLN	B	47	-20.546	107.667	5.488	1.00	29.06	BBBB
ATOM	4149	O	GLN	B	47	-19.412	107.683	5.997	1.00	27.81	BBBB
ATOM	4150	N	ARG	B	48	-20.815	108.075	4.250	1.00	30.23	BBBB
ATOM	4151	CA	ARG	B	48	-19.800	108.562	3.337	1.00	31.26	BBBB
ATOM	4152	CB	ARG	B	48	-20.472	109.204	2.125	1.00	31.50	BBBB
ATOM	4153	CG	ARG	B	48	-21.397	108.262	1.374	0.01	31.64	BBBB
ATOM	4154	CD	ARG	B	48	-22.043	108.945	0.182	0.01	31.84	BBBB
ATOM	4155	NE	ARG	B	48	-22.972	108.061	-0.516	0.01	31.95	BBBB
ATOM	4156	CZ	ARG	B	48	-24.081	107.563	0.022	0.01	32.03	BBBB
ATOM	4157	NH1	ARG	B	48	-24.408	107.861	1.272	0.01	32.04	BBBB
ATOM	4158	NH2	ARG	B	48	-24.866	106.766	-0.689	0.01	32.01	BBBB
ATOM	4159	C	ARG	B	48	-18.828	109.543	3.969	1.00	32.06	BBBB
ATOM	4160	O	ARG	B	48	-19.180	110.283	4.887	1.00	31.63	BBBB
ATOM	4161	N	ASN	B	49	-17.597	109.523	3.467	1.00	32.85	BBBB
ATOM	4162	CA	ASN	B	49	-16.539	110.406	3.931	1.00	32.93	BBBB
ATOM	4163	CB	ASN	B	49	-16.906	111.864	3.670	1.00	35.03	BBBB
ATOM	4164	CG	ASN	B	49	-16.184	112.430	2.471	1.00	38.34	BBBB
ATOM	4165	OD1	ASN	B	49	-16.269	113.625	2.182	1.00	42.12	BBBB
ATOM	4166	ND2	ASN	B	49	-15.458	111.573	1.763	1.00	38.66	BBBB
ATOM	4167	C	ASN	B	49	-16.133	110.260	5.377	1.00	31.90	BBBB
ATOM	4168	O	ASN	B	49	-15.191	110.920	5.808	1.00	32.59	BBBB
ATOM	4169	N	TYR	B	50	-16.840	109.433	6.139	1.00	30.16	BBBB
ATOM	4170	CA	TYR	B	50	-16.453	109.246	7.523	1.00	28.87	BBBB
ATOM	4171	CB	TYR	B	50	-17.556	108.586	8.325	1.00	30.11	BBBB
ATOM	4172	CG	TYR	B	50	-18.487	109.566	8.980	1.00	32.04	BBBB
ATOM	4173	CD1	TYR	B	50	-19.395	110.305	8.225	1.00	33.37	BBBB
ATOM	4174	CE1	TYR	B	50	-20.278	111.198	8.831	1.00	33.21	BBBB
ATOM	4175	CD2	TYR	B	50	-18.476	109.746	10.365	1.00	32.49	BBBB
ATOM	4176	CE2	TYR	B	50	-19.355	110.638	10.980	1.00	33.80	BBBB
ATOM	4177	CZ	TYR	B	50	-20.254	111.357	10.203	1.00	33.37	BBBB
ATOM	4178	OH	TYR	B	50	-21.142	112.216	10.794	1.00	33.69	BBBB
ATOM	4179	C	TYR	B	50	-15.205	108.387	7.553	1.00	28.22	BBBB
ATOM	4180	O	TYR	B	50	-15.059	107.440	6.793	1.00	28.43	BBBB
ATOM	4181	N	ASP	B	51	-14.299	108.729	8.447	1.00	27.78	BBBB
ATOM	4182	CA	ASP	B	51	-13.047	108.026	8.550	1.00	27.08	BBBB
ATOM	4183	CB	ASP	B	51	-11.976	108.996	9.002	1.00	28.01	BBBB
ATOM	4184	CG	ASP	B	51	-10.764	108.299	9.516	1.00	30.24	BBBB
ATOM	4185	OD1	ASP	B	51	-10.873	107.645	10.569	1.00	30.54	BBBB
ATOM	4186	OD2	ASP	B	51	-9.705	108.399	8.865	1.00	32.87	BBBB
ATOM	4187	C	ASP	B	51	-13.057	106.817	9.459	1.00	27.18	BBBB
ATOM	4188	O	ASP	B	51	-13.405	106.910	10.628	1.00	27.55	BBBB
ATOM	4189	N	LEU	B	52	-12.663	105.680	8.898	1.00	26.87	BBBB
ATOM	4190	CA	LEU	B	52	-12.578	104.425	9.623	1.00	27.05	BBBB
ATOM	4191	CB	LEU	B	52	-13.468	103.367	8.975	1.00	25.16	BBBB
ATOM	4192	CG	LEU	B	52	-14.952	103.512	9.300	1.00	27.07	BBBB
ATOM	4193	CD1	LEU	B	52	-15.789	102.504	8.503	1.00	26.21	BBBB
ATOM	4194	CD2	LEU	B	52	-15.138	103.329	10.800	1.00	27.50	BBBB
ATOM	4195	C	LEU	B	52	-11.110	104.007	9.563	1.00	27.79	BBBB

ATOM	4196	O	LEU	B	52	-10.761	102.820	9.523	1.00	28.31	BBBB
ATOM	4197	N	SER	B	53	-10.246	105.008	9.538	1.00	26.49	BBBB
ATOM	4198	CA	SER	B	53	-8.824	104.759	9.502	1.00	25.63	BBBB
ATOM	4199	CB	SER	B	53	-8.086	106.087	9.588	1.00	24.29	BBBB
ATOM	4200	OG	SER	B	53	-6.729	105.887	9.898	1.00	27.15	BBBB
ATOM	4201	C	SER	B	53	-8.418	103.854	10.666	1.00	25.21	BBBB
ATOM	4202	O	SER	B	53	-7.541	102.998	10.519	1.00	24.27	BBBB
ATOM	4203	N	PHE	B	54	-9.080	104.046	11.811	1.00	24.80	BBBB
ATOM	4204	CA	PHE	B	54	-8.792	103.302	13.044	1.00	24.59	BBBB
ATOM	4205	CB	PHE	B	54	-9.570	103.894	14.231	1.00	22.80	BBBB
ATOM	4206	CG	PHE	B	54	-11.066	103.694	14.155	1.00	21.50	BBBB
ATOM	4207	CD1	PHE	B	54	-11.633	102.438	14.358	1.00	20.89	BBBB
ATOM	4208	CD2	PHE	B	54	-11.906	104.764	13.878	1.00	20.48	BBBB
ATOM	4209	CE1	PHE	B	54	-13.007	102.257	14.286	1.00	20.75	BBBB
ATOM	4210	CE2	PHE	B	54	-13.274	104.589	13.805	1.00	21.20	BBBB
ATOM	4211	CZ	PHE	B	54	-13.828	103.332	14.009	1.00	21.35	BBBB
ATOM	4212	C	PHE	B	54	-9.059	101.813	12.998	1.00	25.40	BBBB
ATOM	4213	O	PHE	B	54	-8.743	101.100	13.947	1.00	26.54	BBBB
ATOM	4214	N	LEU	B	55	-9.645	101.342	11.904	1.00	25.48	BBBB
ATOM	4215	CA	LEU	B	55	-9.969	99.929	11.763	1.00	24.96	BBBB
ATOM	4216	CB	LEU	B	55	-11.084	99.771	10.734	1.00	22.81	BBBB
ATOM	4217	CG	LEU	B	55	-12.444	99.273	11.206	1.00	21.86	BBBB
ATOM	4218	CD1	LEU	B	55	-12.604	99.549	12.678	1.00	23.71	BBBB
ATOM	4219	CD2	LEU	B	55	-13.539	99.937	10.401	1.00	19.67	BBBB
ATOM	4220	C	LEU	B	55	-8.780	99.068	11.364	1.00	24.83	BBBB
ATOM	4221	O	LEU	B	55	-8.883	97.851	11.323	1.00	25.48	BBBB
ATOM	4222	N	LYS	B	56	-7.641	99.693	11.115	1.00	25.06	BBBB
ATOM	4223	CA	LYS	B	56	-6.478	98.956	10.666	1.00	26.71	BBBB
ATOM	4224	CB	LYS	B	56	-5.500	99.909	9.985	1.00	28.32	BBBB
ATOM	4225	CG	LYS	B	56	-6.067	100.614	8.753	1.00	28.59	BBBB
ATOM	4226	CD	LYS	B	56	-5.067	101.626	8.231	1.00	31.13	BBBB
ATOM	4227	CE	LYS	B	56	-5.689	102.612	7.261	1.00	34.39	BBBB
ATOM	4228	NZ	LYS	B	56	-4.812	103.810	7.059	1.00	35.67	BBBB
ATOM	4229	C	LYS	B	56	-5.746	98.099	11.678	1.00	27.67	BBBB
ATOM	4230	O	LYS	B	56	-4.871	97.330	11.299	1.00	25.94	BBBB
ATOM	4231	N	THR	B	57	-6.084	98.210	12.958	1.00	29.61	BBBB
ATOM	4232	CA	THR	B	57	-5.412	97.361	13.946	1.00	31.11	BBBB
ATOM	4233	CB	THR	B	57	-5.150	98.110	15.283	1.00	31.39	BBBB
ATOM	4234	OG1	THR	B	57	-6.302	98.867	15.667	1.00	33.84	BBBB
ATOM	4235	CG2	THR	B	57	-3.966	99.033	15.133	1.00	31.02	BBBB
ATOM	4236	C	THR	B	57	-6.132	96.024	14.220	1.00	31.29	BBBB
ATOM	4237	O	THR	B	57	-5.476	95.023	14.541	1.00	31.45	BBBB
ATOM	4238	N	ILE	B	58	-7.461	96.003	14.079	1.00	29.64	BBBB
ATOM	4239	CA	ILE	B	58	-8.240	94.780	14.289	1.00	29.43	BBBB
ATOM	4240	CB	ILE	B	58	-9.640	94.895	13.680	1.00	30.12	BBBB
ATOM	4241	CG2	ILE	B	58	-10.355	93.543	13.766	1.00	27.93	BBBB
ATOM	4242	CG1	ILE	B	58	-10.406	96.033	14.355	1.00	31.18	BBBB
ATOM	4243	CD1	ILE	B	58	-11.489	95.582	15.314	1.00	31.99	BBBB
ATOM	4244	C	ILE	B	58	-7.569	93.594	13.608	1.00	29.47	BBBB
ATOM	4245	O	ILE	B	58	-7.569	93.509	12.391	1.00	30.57	BBBB
ATOM	4246	N	GLN	B	59	-7.012	92.668	14.379	1.00	29.50	BBBB
ATOM	4247	CA	GLN	B	59	-6.342	91.508	13.789	1.00	28.94	BBBB
ATOM	4248	CB	GLN	B	59	-4.940	91.411	14.371	1.00	28.94	BBBB
ATOM	4249	CG	GLN	B	59	-4.112	92.607	13.981	1.00	29.91	BBBB
ATOM	4250	CD	GLN	B	59	-2.876	92.766	14.821	1.00	32.18	BBBB
ATOM	4251	OE1	GLN	B	59	-2.135	91.807	15.055	1.00	32.11	BBBB
ATOM	4252	NE2	GLN	B	59	-2.632	93.990	15.274	1.00	32.32	BBBB
ATOM	4253	C	GLN	B	59	-7.100	90.175	13.919	1.00	27.97	BBBB
ATOM	4254	O	GLN	B	59	-6.989	89.308	13.055	1.00	27.31	BBBB
ATOM	4255	N	GLU	B	60	-7.872	90.020	14.991	1.00	26.91	BBBB
ATOM	4256	CA	GLU	B	60	-8.669	88.819	15.190	1.00	26.01	BBBB
ATOM	4257	CB	GLU	B	60	-8.098	87.936	16.291	1.00	26.68	BBBB
ATOM	4258	CG	GLU	B	60	-6.637	87.617	16.224	1.00	26.79	BBBB
ATOM	4259	CD	GLU	B	60	-6.240	86.722	17.380	1.00	27.26	BBBB
ATOM	4260	OE1	GLU	B	60	-5.026	86.470	17.572	1.00	25.83	BBBB
ATOM	4261	OE2	GLU	B	60	-7.169	86.273	18.091	1.00	24.77	BBBB
ATOM	4262	C	GLU	B	60	-10.070	89.227	15.623	1.00	24.37	BBBB
ATOM	4263	O	GLU	B	60	-10.266	90.301	16.169	1.00	25.06	BBBB
ATOM	4264	N	VAL	B	61	-11.038	88.358	15.386	1.00	22.07	BBBB
ATOM	4265	CA	VAL	B	61	-12.410	88.614	15.783	1.00	20.80	BBBB
ATOM	4266	CB	VAL	B	61	-13.249	89.189	14.652	1.00	19.27	BBBB
ATOM	4267	CG1	VAL	B	61	-14.703	89.157	15.040	1.00	18.41	BBBB
ATOM	4268	CG2	VAL	B	61	-12.820	90.610	14.363	1.00	19.40	BBBB
ATOM	4269	C	VAL	B	61	-12.955	87.263	16.154	1.00	21.79	BBBB
ATOM	4270	O	VAL	B	61	-13.102	86.385	15.294	1.00	21.96	BBBB

ATOM	4271	N	ALA	B	62	-13.246	87.096	17.442	1.00	20.58	BBBB
ATOM	4272	CA	ALA	B	62	-13.729	85.832	17.946	1.00	19.45	BBBB
ATOM	4273	CB	ALA	B	62	-13.605	85.824	19.426	1.00	20.44	BBBB
ATOM	4274	C	ALA	B	62	-15.151	85.518	17.519	1.00	19.88	BBBB
ATOM	4275	O	ALA	B	62	-15.495	84.363	17.272	1.00	19.28	BBBB
ATOM	4276	N	GLY	B	63	-15.978	86.548	17.430	1.00	19.97	BBBB
ATOM	4277	CA	GLY	B	63	-17.348	86.345	17.004	1.00	20.79	BBBB
ATOM	4278	C	GLY	B	63	-17.446	86.461	15.494	1.00	21.56	BBBB
ATOM	4279	O	GLY	B	63	-16.535	86.045	14.763	1.00	21.48	BBBB
ATOM	4280	N	TYR	B	64	-18.549	87.039	15.023	1.00	20.62	BBBB
ATOM	4281	CA	TYR	B	64	-18.777	87.215	13.598	1.00	18.55	BBBB
ATOM	4282	CB	TYR	B	64	-20.227	86.844	13.258	1.00	17.60	BBBB
ATOM	4283	CG	TYR	B	64	-21.268	87.692	13.942	1.00	16.75	BBBB
ATOM	4284	CD1	TYR	B	64	-21.383	89.055	13.658	1.00	16.16	BBBB
ATOM	4285	CE1	TYR	B	64	-22.296	89.854	14.321	1.00	16.19	BBBB
ATOM	4286	CD2	TYR	B	64	-22.108	87.146	14.906	1.00	15.85	BBBB
ATOM	4287	CE2	TYR	B	64	-23.031	87.937	15.582	1.00	15.55	BBBB
ATOM	4288	CZ	TYR	B	64	-23.114	89.293	15.285	1.00	17.26	BBBB
ATOM	4289	OH	TYR	B	64	-23.978	90.097	15.984	1.00	19.90	BBBB
ATOM	4290	C	TYR	B	64	-18.462	88.652	13.184	1.00	18.53	BBBB
ATOM	4291	O	TYR	B	64	-18.371	89.526	14.033	1.00	18.65	BBBB
ATOM	4292	N	VAL	B	65	-18.290	88.885	11.882	1.00	18.60	BBBB
ATOM	4293	CA	VAL	B	65	-17.977	90.217	11.370	1.00	18.87	BBBB
ATOM	4294	CB	VAL	B	65	-16.652	90.200	10.629	1.00	16.01	BBBB
ATOM	4295	CG1	VAL	B	65	-16.099	91.591	10.531	1.00	16.99	BBBB
ATOM	4296	CG2	VAL	B	65	-15.700	89.312	11.333	1.00	16.38	BBBB
ATOM	4297	C	VAL	B	65	-19.046	90.806	10.430	1.00	19.67	BBBB
ATOM	4298	O	VAL	B	65	-18.969	90.649	9.222	1.00	20.93	BBBB
ATOM	4299	N	LEU	B	66	-20.009	91.528	10.996	1.00	20.30	BBBB
ATOM	4300	CA	LEU	B	66	-21.098	92.140	10.238	1.00	19.97	BBBB
ATOM	4301	CB	LEU	B	66	-22.342	92.267	11.099	1.00	17.98	BBBB
ATOM	4302	CG	LEU	B	66	-23.620	92.538	10.322	1.00	16.54	BBBB
ATOM	4303	CD1	LEU	B	66	-24.075	91.261	9.690	1.00	15.00	BBBB
ATOM	4304	CD2	LEU	B	66	-24.695	93.046	11.241	1.00	17.15	BBBB
ATOM	4305	C	LEU	B	66	-20.835	93.519	9.691	1.00	20.11	BBBB
ATOM	4306	O	LEU	B	66	-20.629	94.438	10.455	1.00	18.63	BBBB
ATOM	4307	N	ILE	B	67	-20.875	93.667	8.367	1.00	22.07	BBBB
ATOM	4308	CA	ILE	B	67	-20.715	94.976	7.733	1.00	22.04	BBBB
ATOM	4309	CB	ILE	B	67	-19.515	95.000	6.827	1.00	20.69	BBBB
ATOM	4310	CG2	ILE	B	67	-19.354	96.394	6.274	1.00	22.62	BBBB
ATOM	4311	CG1	ILE	B	67	-18.277	94.571	7.611	1.00	22.94	BBBB
ATOM	4312	CD1	ILE	B	67	-16.949	94.759	6.884	1.00	21.84	BBBB
ATOM	4313	C	ILE	B	67	-21.975	95.272	6.902	1.00	21.25	BBBB
ATOM	4314	O	ILE	B	67	-22.034	94.890	5.747	1.00	21.29	BBBB
ATOM	4315	N	ALA	B	68	-22.962	95.966	7.477	1.00	21.62	BBBB
ATOM	4316	CA	ALA	B	68	-24.231	96.222	6.779	1.00	23.88	BBBB
ATOM	4317	CB	ALA	B	68	-25.246	95.151	7.192	1.00	24.62	BBBB
ATOM	4318	C	ALA	B	68	-24.909	97.592	6.875	1.00	23.45	BBBB
ATOM	4319	O	ALA	B	68	-25.067	98.155	7.955	1.00	25.69	BBBB
ATOM	4320	N	LEU	B	69	-25.348	98.092	5.728	1.00	22.26	BBBB
ATOM	4321	CA	LEU	B	69	-26.038	99.372	5.627	1.00	22.36	BBBB
ATOM	4322	CB	LEU	B	69	-27.151	99.457	6.674	1.00	20.98	BBBB
ATOM	4323	CG	LEU	B	69	-28.260	98.434	6.413	1.00	19.85	BBBB
ATOM	4324	CD1	LEU	B	69	-29.309	98.425	7.502	1.00	18.53	BBBB
ATOM	4325	CD2	LEU	B	69	-28.877	98.775	5.104	1.00	19.83	BBBB
ATOM	4326	C	LEU	B	69	-25.176	100.623	5.689	1.00	23.47	BBBB
ATOM	4327	O	LEU	B	69	-25.671	101.692	6.004	1.00	23.15	BBBB
ATOM	4328	N	ASN	B	70	-23.895	100.501	5.361	1.00	25.86	BBBB
ATOM	4329	CA	ASN	B	70	-23.004	101.655	5.383	1.00	28.49	BBBB
ATOM	4330	CB	ASN	B	70	-21.613	101.292	5.911	1.00	30.30	BBBB
ATOM	4331	CG	ASN	B	70	-21.650	100.406	7.116	1.00	30.50	BBBB
ATOM	4332	OD1	ASN	B	70	-20.739	100.430	7.931	1.00	30.60	BBBB
ATOM	4333	ND2	ASN	B	70	-22.684	99.596	7.229	1.00	31.47	BBBB
ATOM	4334	C	ASN	B	70	-22.821	102.162	3.964	1.00	29.60	BBBB
ATOM	4335	O	ASN	B	70	-23.051	101.430	3.013	1.00	30.55	BBBB
ATOM	4336	N	THR	B	71	-22.377	103.407	3.821	1.00	30.06	BBBB
ATOM	4337	CA	THR	B	71	-22.145	103.970	2.496	1.00	29.40	BBBB
ATOM	4338	CB	THR	B	71	-23.180	105.051	2.161	1.00	28.17	BBBB
ATOM	4339	OG1	THR	B	71	-22.986	106.181	3.014	1.00	27.66	BBBB
ATOM	4340	CG2	THR	B	71	-24.586	104.515	2.372	1.00	28.17	BBBB
ATOM	4341	C	THR	B	71	-20.747	104.571	2.439	1.00	29.79	BBBB
ATOM	4342	O	THR	B	71	-20.377	105.196	1.463	1.00	30.53	BBBB
ATOM	4343	N	VAL	B	72	-19.975	104.351	3.494	1.00	29.86	BBBB
ATOM	4344	CA	VAL	B	72	-18.611	104.858	3.603	1.00	31.00	BBBB
ATOM	4345	CB	VAL	B	72	-17.892	104.246	4.799	1.00	29.82	BBBB

ATOM	4346	CG1	VAL	B	72	-17.257	105.349	5.632	1.00	27.41	BBBB
ATOM	4347	CG2	VAL	B	72	-18.862	103.373	5.597	1.00	29.35	BBBB
ATOM	4348	C	VAL	B	72	-17.676	104.668	2.407	1.00	32.70	BBBB
ATOM	4349	O	VAL	B	72	-16.618	105.283	2.352	1.00	35.16	BBBB
ATOM	4350	N	GLU	B	73	-18.028	103.811	1.464	1.00	33.41	BBBB
ATOM	4351	CA	GLU	B	73	-17.166	103.606	0.302	1.00	35.17	BBBB
ATOM	4352	CB	GLU	B	73	-16.788	104.952	-0.329	1.00	36.45	BBBB
ATOM	4353	CG	GLU	B	73	-18.002	105.783	-0.737	1.00	39.32	BBBB
ATOM	4354	CD	GLU	B	73	-17.748	106.644	-1.955	1.00	41.38	BBBB
ATOM	4355	OE1	GLU	B	73	-18.720	107.270	-2.439	1.00	39.74	BBBB
ATOM	4356	OE2	GLU	B	73	-16.581	106.685	-2.423	1.00	43.08	BBBB
ATOM	4357	C	GLU	B	73	-15.896	102.795	0.565	1.00	34.57	BBBB
ATOM	4358	O	GLU	B	73	-15.432	102.069	-0.321	1.00	35.13	BBBB
ATOM	4359	N	ARG	B	74	-15.327	102.912	1.762	1.00	32.24	BBBB
ATOM	4360	CA	ARG	B	74	-14.126	102.143	2.088	1.00	30.68	BBBB
ATOM	4361	CB	ARG	B	74	-12.887	102.875	1.603	1.00	31.93	BBBB
ATOM	4362	CG	ARG	B	74	-11.567	102.229	2.004	1.00	33.30	BBBB
ATOM	4363	CD	ARG	B	74	-10.432	103.109	1.522	1.00	34.90	BBBB
ATOM	4364	NE	ARG	B	74	-9.164	102.831	2.180	1.00	37.64	BBBB
ATOM	4365	CZ	ARG	B	74	-8.459	101.717	2.021	1.00	39.71	BBBB
ATOM	4366	NH1	ARG	B	74	-8.905	100.757	1.218	1.00	39.94	BBBB
ATOM	4367	NH2	ARG	B	74	-7.298	101.574	2.657	1.00	40.39	BBBB
ATOM	4368	C	ARG	B	74	-13.970	101.791	3.571	1.00	29.18	BBBB
ATOM	4369	O	ARG	B	74	-13.967	102.659	4.437	1.00	29.36	BBBB
ATOM	4370	N	ILE	B	75	-13.825	100.496	3.832	1.00	26.27	BBBB
ATOM	4371	CA	ILE	B	75	-13.676	99.951	5.163	1.00	23.00	BBBB
ATOM	4372	CB	ILE	B	75	-14.792	98.981	5.428	1.00	22.40	BBBB
ATOM	4373	CG2	ILE	B	75	-14.738	98.516	6.868	1.00	23.60	BBBB
ATOM	4374	CG1	ILE	B	75	-16.119	99.658	5.085	1.00	21.89	BBBB
ATOM	4375	CD1	ILE	B	75	-17.352	98.839	5.353	1.00	19.46	BBBB
ATOM	4376	C	ILE	B	75	-12.356	99.207	5.233	1.00	22.75	BBBB
ATOM	4377	O	ILE	B	75	-12.330	97.994	5.120	1.00	23.28	BBBB
ATOM	4378	N	PRO	B	76	-11.245	99.928	5.453	1.00	22.63	BBBB
ATOM	4379	CD	PRO	B	76	-11.305	101.342	5.861	1.00	23.05	BBBB
ATOM	4380	CA	PRO	B	76	-9.862	99.447	5.547	1.00	23.63	BBBB
ATOM	4381	CB	PRO	B	76	-9.075	100.733	5.766	1.00	23.09	BBBB
ATOM	4382	CG	PRO	B	76	-10.007	101.516	6.616	1.00	22.65	BBBB
ATOM	4383	C	PRO	B	76	-9.470	98.393	6.573	1.00	24.83	BBBB
ATOM	4384	O	PRO	B	76	-8.460	98.559	7.253	1.00	25.80	BBBB
ATOM	4385	N	LEU	B	77	-10.237	97.318	6.699	1.00	25.49	BBBB
ATOM	4386	CA	LEU	B	77	-9.867	96.262	7.638	1.00	25.80	BBBB
ATOM	4387	CB	LEU	B	77	-11.047	95.315	7.857	1.00	23.85	BBBB
ATOM	4388	CG	LEU	B	77	-12.291	95.815	8.589	1.00	23.52	BBBB
ATOM	4389	CD1	LEU	B	77	-13.399	94.772	8.485	1.00	24.91	BBBB
ATOM	4390	CD2	LEU	B	77	-11.961	96.077	10.043	1.00	22.54	BBBB
ATOM	4391	C	LEU	B	77	-8.695	95.492	7.004	1.00	27.15	BBBB
ATOM	4392	O	LEU	B	77	-8.817	94.318	6.711	1.00	28.72	BBBB
ATOM	4393	N	GLU	B	78	-7.557	96.146	6.809	1.00	28.42	BBBB
ATOM	4394	CA	GLU	B	78	-6.423	95.497	6.161	1.00	30.59	BBBB
ATOM	4395	CB	GLU	B	78	-5.677	96.523	5.296	1.00	31.81	BBBB
ATOM	4396	CG	GLU	B	78	-5.256	97.814	5.967	1.00	31.66	BBBB
ATOM	4397	CD	GLU	B	78	-5.512	99.010	5.066	1.00	33.32	BBBB
ATOM	4398	OE1	GLU	B	78	-4.733	99.993	5.106	1.00	34.43	BBBB
ATOM	4399	OE2	GLU	B	78	-6.512	98.967	4.318	1.00	31.90	BBBB
ATOM	4400	C	GLU	B	78	-5.413	94.675	6.977	1.00	31.65	BBBB
ATOM	4401	O	GLU	B	78	-4.322	94.346	6.485	1.00	30.37	BBBB
ATOM	4402	N	ASN	B	79	-5.769	94.322	8.208	1.00	32.04	BBBB
ATOM	4403	CA	ASN	B	79	-4.870	93.512	9.010	1.00	31.26	BBBB
ATOM	4404	CB	ASN	B	79	-4.149	94.378	10.020	1.00	34.31	BBBB
ATOM	4405	CG	ASN	B	79	-3.245	95.386	9.352	1.00	36.48	BBBB
ATOM	4406	OD1	ASN	B	79	-2.443	95.034	8.490	1.00	38.45	BBBB
ATOM	4407	ND2	ASN	B	79	-3.370	96.649	9.742	1.00	37.71	BBBB
ATOM	4408	C	ASN	B	79	-5.584	92.362	9.681	1.00	30.06	BBBB
ATOM	4409	O	ASN	B	79	-4.948	91.495	10.258	1.00	30.52	BBBB
ATOM	4410	N	LEU	B	80	-6.909	92.366	9.585	1.00	28.58	BBBB
ATOM	4411	CA	LEU	B	80	-7.750	91.308	10.124	1.00	28.20	BBBB
ATOM	4412	CB	LEU	B	80	-9.199	91.553	9.696	1.00	24.82	BBBB
ATOM	4413	CG	LEU	B	80	-10.233	90.453	9.909	1.00	22.74	BBBB
ATOM	4414	CD1	LEU	B	80	-10.339	90.171	11.395	1.00	24.38	BBBB
ATOM	4415	CD2	LEU	B	80	-11.576	90.864	9.348	1.00	19.62	BBBB
ATOM	4416	C	LEU	B	80	-7.243	89.999	9.513	1.00	31.02	BBBB
ATOM	4417	O	LEU	B	80	-7.055	89.925	8.299	1.00	31.65	BBBB
ATOM	4418	N	GLN	B	81	-7.023	88.971	10.334	1.00	32.80	BBBB
ATOM	4419	CA	GLN	B	81	-6.519	87.689	9.831	1.00	34.53	BBBB
ATOM	4420	CB	GLN	B	81	-5.209	87.334	10.507	1.00	36.99	BBBB

ATOM	4421	CG	GLN	B	81	-4.139	88.340	10.307	1.00	42.64	BBBB
ATOM	4422	CD	GLN	B	81	-2.799	87.752	10.588	1.00	46.18	BBBB
ATOM	4423	OE1	GLN	B	81	-2.530	87.301	11.703	1.00	48.30	BBBB
ATOM	4424	NE2	GLN	B	81	-1.939	87.735	9.573	1.00	47.89	BBBB
ATOM	4425	C	GLN	B	81	-7.455	86.506	10.006	1.00	34.71	BBBB
ATOM	4426	O	GLN	B	81	-7.643	85.705	9.088	1.00	35.21	BBBB
ATOM	4427	N	ILE	B	82	-8.015	86.384	11.203	1.00	33.86	BBBB
ATOM	4428	CA	ILE	B	82	-8.913	85.292	11.508	1.00	32.31	BBBB
ATOM	4429	CB	ILE	B	82	-8.283	84.356	12.555	1.00	34.71	BBBB
ATOM	4430	CG2	ILE	B	82	-9.188	83.147	12.829	1.00	36.06	BBBB
ATOM	4431	CG1	ILE	B	82	-6.944	83.862	12.030	1.00	36.99	BBBB
ATOM	4432	CD1	ILE	B	82	-7.044	83.227	10.637	1.00	40.63	BBBB
ATOM	4433	C	ILE	B	82	-10.234	85.786	12.035	1.00	29.88	BBBB
ATOM	4434	O	ILE	B	82	-10.323	86.842	12.636	1.00	29.23	BBBB
ATOM	4435	N	ILE	B	83	-11.265	85.007	11.775	1.00	28.33	BBBB
ATOM	4436	CA	ILE	B	83	-12.598	85.293	12.253	1.00	28.31	BBBB
ATOM	4437	CB	ILE	B	83	-13.521	85.768	11.102	1.00	26.03	BBBB
ATOM	4438	CG2	ILE	B	83	-14.973	85.686	11.512	1.00	22.70	BBBB
ATOM	4439	CG1	ILE	B	83	-13.151	87.205	10.726	1.00	24.48	BBBB
ATOM	4440	CD1	ILE	B	83	-13.696	87.674	9.409	1.00	24.24	BBBB
ATOM	4441	C	ILE	B	83	-12.992	83.925	12.771	1.00	30.19	BBBB
ATOM	4442	O	ILE	B	83	-13.372	83.054	11.998	1.00	31.26	BBBB
ATOM	4443	N	ARG	B	84	-12.859	83.742	14.085	1.00	31.66	BBBB
ATOM	4444	CA	ARG	B	84	-13.145	82.474	14.754	1.00	32.51	BBBB
ATOM	4445	CB	ARG	B	84	-12.712	82.580	16.216	1.00	32.08	BBBB
ATOM	4446	CG	ARG	B	84	-11.224	82.889	16.387	1.00	32.01	BBBB
ATOM	4447	CD	ARG	B	84	-10.807	83.065	17.859	1.00	31.34	BBBB
ATOM	4448	NE	ARG	B	84	-9.402	83.443	17.935	1.00	29.09	BBBB
ATOM	4449	CZ	ARG	B	84	-8.398	82.593	17.771	1.00	29.02	BBBB
ATOM	4450	NH1	ARG	B	84	-8.651	81.317	17.548	1.00	30.40	BBBB
ATOM	4451	NH2	ARG	B	84	-7.147	83.027	17.756	1.00	28.44	BBBB
ATOM	4452	C	ARG	B	84	-14.579	81.933	14.671	1.00	33.97	BBBB
ATOM	4453	O	ARG	B	84	-14.825	80.774	14.987	1.00	34.87	BBBB
ATOM	4454	N	GLY	B	85	-15.522	82.763	14.252	1.00	35.29	BBBB
ATOM	4455	CA	GLY	B	85	-16.892	82.307	14.139	1.00	36.57	BBBB
ATOM	4456	C	GLY	B	85	-17.435	81.605	15.365	1.00	37.92	BBBB
ATOM	4457	O	GLY	B	85	-18.178	80.633	15.248	1.00	36.65	BBBB
ATOM	4458	N	ASN	B	86	-17.072	82.093	16.548	1.00	40.91	BBBB
ATOM	4459	CA	ASN	B	86	-17.558	81.495	17.792	1.00	43.24	BBBB
ATOM	4460	CB	ASN	B	86	-16.755	81.993	18.990	1.00	43.81	BBBB
ATOM	4461	CG	ASN	B	86	-15.354	81.452	19.007	1.00	46.15	BBBB
ATOM	4462	OD1	ASN	B	86	-15.141	80.242	18.854	1.00	47.38	BBBB
ATOM	4463	ND2	ASN	B	86	-14.382	82.336	19.197	1.00	45.97	BBBB
ATOM	4464	C	ASN	B	86	-19.010	81.857	17.990	1.00	43.88	BBBB
ATOM	4465	O	ASN	B	86	-19.636	81.448	18.959	1.00	43.31	BBBB
ATOM	4466	N	MET	B	87	-19.526	82.647	17.057	1.00	46.19	BBBB
ATOM	4467	CA	MET	B	87	-20.907	83.095	17.085	1.00	47.55	BBBB
ATOM	4468	CB	MET	B	87	-21.076	84.209	18.116	1.00	49.30	BBBB
ATOM	4469	CG	MET	B	87	-22.477	84.319	18.703	1.00	53.00	BBBB
ATOM	4470	SD	MET	B	87	-22.622	85.712	19.846	1.00	58.13	BBBB
ATOM	4471	CE	MET	B	87	-21.027	85.556	20.764	1.00	56.33	BBBB
ATOM	4472	C	MET	B	87	-21.245	83.600	15.686	1.00	46.85	BBBB
ATOM	4473	O	MET	B	87	-20.521	84.410	15.114	1.00	46.81	BBBB
ATOM	4474	N	TYR	B	88	-22.345	83.102	15.139	1.00	46.07	BBBB
ATOM	4475	CA	TYR	B	88	-22.778	83.478	13.804	1.00	45.70	BBBB
ATOM	4476	CB	TYR	B	88	-23.446	82.305	13.088	1.00	45.54	BBBB
ATOM	4477	CG	TYR	B	88	-22.656	81.034	13.044	1.00	43.37	BBBB
ATOM	4478	CD1	TYR	B	88	-23.253	79.850	12.627	1.00	42.66	BBBB
ATOM	4479	CE1	TYR	B	88	-22.541	78.665	12.584	1.00	41.79	BBBB
ATOM	4480	CD2	TYR	B	88	-21.318	81.004	13.417	1.00	42.77	BBBB
ATOM	4481	CE2	TYR	B	88	-20.598	79.825	13.376	1.00	42.45	BBBB
ATOM	4482	CZ	TYR	B	88	-21.216	78.657	12.959	1.00	40.86	BBBB
ATOM	4483	OH	TYR	B	88	-20.507	77.483	12.919	1.00	39.81	BBBB
ATOM	4484	C	TYR	B	88	-23.797	84.582	13.840	1.00	45.65	BBBB
ATOM	4485	O	TYR	B	88	-24.493	84.783	14.837	1.00	45.59	BBBB
ATOM	4486	N	TYR	B	89	-23.889	85.280	12.720	1.00	45.33	BBBB
ATOM	4487	CA	TYR	B	89	-24.869	86.327	12.555	1.00	46.09	BBBB
ATOM	4488	CB	TYR	B	89	-24.357	87.378	11.577	1.00	44.37	BBBB
ATOM	4489	CG	TYR	B	89	-25.439	88.314	11.139	1.00	43.69	BBBB
ATOM	4490	CD1	TYR	B	89	-26.070	89.146	12.056	1.00	43.85	BBBB
ATOM	4491	CE1	TYR	B	89	-27.129	89.962	11.673	1.00	43.97	BBBB
ATOM	4492	CD2	TYR	B	89	-25.885	88.322	9.823	1.00	42.50	BBBB
ATOM	4493	CE2	TYR	B	89	-26.938	89.132	9.431	1.00	43.74	BBBB
ATOM	4494	CZ	TYR	B	89	-27.558	89.948	10.361	1.00	43.56	BBBB
ATOM	4495	OH	TYR	B	89	-28.613	90.740	9.982	1.00	42.96	BBBB

ATOM	4496	C	TYR	B	89	-26.097	85.613	11.980	1.00	47.01	BBBB
ATOM	4497	O	TYR	B	89	-25.997	84.911	10.973	1.00	46.04	BBBB
ATOM	4498	N	GLU	B	90	-27.248	85.761	12.630	1.00	49.08	BBBB
ATOM	4499	CA	GLU	B	90	-28.462	85.103	12.151	1.00	51.04	BBBB
ATOM	4500	CB	GLU	B	90	-28.944	85.787	10.859	1.00	53.53	BBBB
ATOM	4501	CG	GLU	B	90	-30.421	86.181	10.866	1.00	56.98	BBBB
ATOM	4502	CD	GLU	B	90	-30.814	86.973	12.110	1.00	59.48	BBBB
ATOM	4503	OE1	GLU	B	90	-30.609	88.209	12.144	1.00	59.94	BBBB
ATOM	4504	OE2	GLU	B	90	-31.319	86.345	13.066	1.00	60.61	BBBB
ATOM	4505	C	GLU	B	90	-28.114	83.632	11.892	1.00	50.83	BBBB
ATOM	4506	O	GLU	B	90	-28.396	83.088	10.822	1.00	50.69	BBBB
ATOM	4507	N	ASN	B	91	-27.499	83.008	12.900	1.00	50.56	BBBB
ATOM	4508	CA	ASN	B	91	-27.039	81.610	12.872	1.00	48.83	BBBB
ATOM	4509	CB	ASN	B	91	-27.982	80.711	13.686	1.00	49.20	BBBB
ATOM	4510	CG	ASN	B	91	-29.435	80.864	13.293	1.00	49.60	BBBB
ATOM	4511	OD1	ASN	B	91	-30.318	80.323	13.956	1.00	51.32	BBBB
ATOM	4512	ND2	ASN	B	91	-29.694	81.594	12.217	1.00	48.50	BBBB
ATOM	4513	C	ASN	B	91	-26.813	81.014	11.487	1.00	46.90	BBBB
ATOM	4514	O	ASN	B	91	-27.704	80.397	10.909	1.00	46.09	BBBB
ATOM	4515	N	SER	B	92	-25.600	81.195	10.974	1.00	44.64	BBBB
ATOM	4516	CA	SER	B	92	-25.246	80.692	9.654	1.00	42.53	BBBB
ATOM	4517	CB	SER	B	92	-26.373	81.028	8.669	1.00	43.20	BBBB
ATOM	4518	OG	SER	B	92	-26.111	80.527	7.371	1.00	44.97	BBBB
ATOM	4519	C	SER	B	92	-23.917	81.267	9.134	1.00	40.48	BBBB
ATOM	4520	O	SER	B	92	-23.022	80.528	8.734	1.00	40.06	BBBB
ATOM	4521	N	TYR	B	93	-23.783	82.587	9.166	1.00	37.87	BBBB
ATOM	4522	CA	TYR	B	93	-22.586	83.235	8.654	1.00	34.79	BBBB
ATOM	4523	CB	TYR	B	93	-23.014	84.277	7.620	1.00	35.28	BBBB
ATOM	4524	CG	TYR	B	93	-24.075	83.788	6.652	1.00	36.16	BBBB
ATOM	4525	CD1	TYR	B	93	-25.433	83.943	6.931	1.00	36.78	BBBB
ATOM	4526	CE1	TYR	B	93	-26.410	83.499	6.045	1.00	37.22	BBBB
ATOM	4527	CD2	TYR	B	93	-23.721	83.173	5.460	1.00	36.95	BBBB
ATOM	4528	CE2	TYR	B	93	-24.689	82.727	4.563	1.00	38.63	BBBB
ATOM	4529	CZ	TYR	B	93	-26.028	82.893	4.863	1.00	38.91	BBBB
ATOM	4530	OH	TYR	B	93	-26.975	82.453	3.970	1.00	40.90	BBBB
ATOM	4531	C	TYR	B	93	-21.653	83.882	9.690	1.00	31.78	BBBB
ATOM	4532	O	TYR	B	93	-22.108	84.504	10.629	1.00	31.61	BBBB
ATOM	4533	N	ALA	B	94	-20.346	83.734	9.497	1.00	28.27	BBBB
ATOM	4534	CA	ALA	B	94	-19.351	84.311	10.381	1.00	26.34	BBBB
ATOM	4535	CB	ALA	B	94	-18.146	83.410	10.445	1.00	24.88	BBBB
ATOM	4536	C	ALA	B	94	-18.951	85.694	9.848	1.00	27.81	BBBB
ATOM	4537	O	ALA	B	94	-18.506	86.566	10.594	1.00	28.28	BBBB
ATOM	4538	N	LEU	B	95	-19.102	85.879	8.539	1.00	28.94	BBBB
ATOM	4539	CA	LEU	B	95	-18.800	87.147	7.858	1.00	28.50	BBBB
ATOM	4540	CB	LEU	B	95	-17.614	86.979	6.894	1.00	27.11	BBBB
ATOM	4541	CG	LEU	B	95	-17.301	88.138	5.948	1.00	26.09	BBBB
ATOM	4542	CD1	LEU	B	95	-17.073	89.381	6.764	1.00	27.81	BBBB
ATOM	4543	CD2	LEU	B	95	-16.075	87.832	5.115	1.00	25.37	BBBB
ATOM	4544	C	LEU	B	95	-20.060	87.473	7.071	1.00	28.00	BBBB
ATOM	4545	O	LEU	B	95	-20.556	86.622	6.338	1.00	29.39	BBBB
ATOM	4546	N	ALA	B	96	-20.595	88.678	7.221	1.00	26.51	BBBB
ATOM	4547	CA	ALA	B	96	-21.812	89.022	6.497	1.00	25.96	BBBB
ATOM	4548	CB	ALA	B	96	-23.029	88.545	7.263	1.00	21.58	BBBB
ATOM	4549	C	ALA	B	96	-21.964	90.494	6.172	1.00	26.73	BBBB
ATOM	4550	O	ALA	B	96	-22.398	91.269	7.021	1.00	25.27	BBBB
ATOM	4551	N	VAL	B	97	-21.605	90.864	4.936	1.00	28.19	BBBB
ATOM	4552	CA	VAL	B	97	-21.735	92.242	4.447	1.00	29.87	BBBB
ATOM	4553	CB	VAL	B	97	-20.523	92.638	3.530	1.00	30.05	BBBB
ATOM	4554	CG1	VAL	B	97	-19.291	91.835	3.927	1.00	30.18	BBBB
ATOM	4555	CG2	VAL	B	97	-20.848	92.449	2.072	1.00	31.39	BBBB
ATOM	4556	C	VAL	B	97	-23.084	92.310	3.698	1.00	29.37	BBBB
ATOM	4557	O	VAL	B	97	-23.327	91.539	2.781	1.00	29.28	BBBB
ATOM	4558	N	LEU	B	98	-23.959	93.228	4.100	1.00	30.18	BBBB
ATOM	4559	CA	LEU	B	98	-25.297	93.310	3.517	1.00	31.06	BBBB
ATOM	4560	CB	LEU	B	98	-26.283	92.666	4.483	1.00	28.85	BBBB
ATOM	4561	CG	LEU	B	98	-25.781	91.362	5.084	1.00	26.62	BBBB
ATOM	4562	CD1	LEU	B	98	-26.578	90.993	6.313	1.00	24.74	BBBB
ATOM	4563	CD2	LEU	B	98	-25.871	90.296	4.025	1.00	27.42	BBBB
ATOM	4564	C	LEU	B	98	-25.830	94.694	3.168	1.00	32.69	BBBB
ATOM	4565	O	LEU	B	98	-25.754	95.611	3.976	1.00	33.56	BBBB
ATOM	4566	N	SER	B	99	-26.409	94.805	1.972	1.00	34.47	BBBB
ATOM	4567	CA	SER	B	99	-27.020	96.029	1.426	1.00	34.50	BBBB
ATOM	4568	CB	SER	B	99	-28.524	96.043	1.721	1.00	36.58	BBBB
ATOM	4569	OG	SER	B	99	-28.790	96.059	3.111	1.00	37.02	BBBB
ATOM	4570	C	SER	B	99	-26.424	97.353	1.854	1.00	34.63	BBBB

ATOM	4571	O	SER	B	99	-26.972	98.046	2.703	1.00	33.28	BBBB
ATOM	4572	N	ASN	B	100	-25.327	97.720	1.211	1.00	36.53	BBBB
ATOM	4573	CA	ASN	B	100	-24.621	98.948	1.522	1.00	39.81	BBBB
ATOM	4574	CB	ASN	B	100	-23.150	98.606	1.659	1.00	39.99	BBBB
ATOM	4575	CG	ASN	B	100	-22.917	97.458	2.623	1.00	40.53	BBBB
ATOM	4576	OD1	ASN	B	100	-23.069	97.615	3.835	1.00	41.99	BBBB
ATOM	4577	ND2	ASN	B	100	-22.560	96.294	2.088	1.00	38.68	BBBB
ATOM	4578	C	ASN	B	100	-24.816	100.028	0.459	1.00	42.46	BBBB
ATOM	4579	O	ASN	B	100	-23.896	100.295	-0.322	1.00	42.49	BBBB
ATOM	4580	N	TYR	B	101	-25.990	100.671	0.459	1.00	45.26	BBBB
ATOM	4581	CA	TYR	B	101	-26.320	101.696	-0.539	1.00	48.73	BBBB
ATOM	4582	CB	TYR	B	101	-26.584	101.006	-1.875	1.00	49.01	BBBB
ATOM	4583	CG	TYR	B	101	-27.779	100.077	-1.804	1.00	49.09	BBBB
ATOM	4584	CD1	TYR	B	101	-29.081	100.563	-1.948	1.00	49.20	BBBB
ATOM	4585	CE1	TYR	B	101	-30.191	99.726	-1.775	1.00	49.73	BBBB
ATOM	4586	CD2	TYR	B	101	-27.613	98.727	-1.496	1.00	49.51	BBBB
ATOM	4587	CE2	TYR	B	101	-28.716	97.881	-1.323	1.00	50.17	BBBB
ATOM	4588	CZ	TYR	B	101	-29.999	98.387	-1.459	1.00	50.12	BBBB
ATOM	4589	OH	TYR	B	101	-31.080	97.563	-1.244	1.00	50.04	BBBB
ATOM	4590	C	TYR	B	101	-27.557	102.544	-0.213	1.00	50.98	BBBB
ATOM	4591	O	TYR	B	101	-28.098	102.489	0.891	1.00	50.92	BBBB
ATOM	4592	N	ASP	B	102	-27.983	103.309	-1.226	1.00	53.88	BBBB
ATOM	4593	CA	ASP	B	102	-29.171	104.177	-1.219	1.00	56.27	BBBB
ATOM	4594	CB	ASP	B	102	-29.482	104.740	0.173	1.00	55.80	BBBB
ATOM	4595	CG	ASP	B	102	-30.568	105.822	0.136	1.00	55.26	BBBB
ATOM	4596	OD1	ASP	B	102	-30.211	107.017	0.105	1.00	54.26	BBBB
ATOM	4597	OD2	ASP	B	102	-31.773	105.482	0.120	1.00	54.34	BBBB
ATOM	4598	C	ASP	B	102	-29.102	105.346	-2.202	1.00	58.00	BBBB
ATOM	4599	O	ASP	B	102	-28.121	106.090	-2.223	1.00	58.97	BBBB
ATOM	4600	N	ALA	B	103	-30.159	105.480	-3.009	1.00	59.15	BBBB
ATOM	4601	CA	ALA	B	103	-30.325	106.546	-4.006	1.00	60.50	BBBB
ATOM	4602	CB	ALA	B	103	-30.371	107.904	-3.299	1.00	59.87	BBBB
ATOM	4603	C	ALA	B	103	-29.331	106.611	-5.175	1.00	61.53	BBBB
ATOM	4604	O	ALA	B	103	-29.705	106.478	-6.345	1.00	61.84	BBBB
ATOM	4605	N	ASN	B	104	-28.067	106.839	-4.855	1.00	62.37	BBBB
ATOM	4606	CA	ASN	B	104	-27.020	106.947	-5.859	1.00	63.25	BBBB
ATOM	4607	CB	ASN	B	104	-25.840	107.700	-5.247	1.00	64.03	BBBB
ATOM	4608	CG	ASN	B	104	-25.704	107.443	-3.749	1.00	65.56	BBBB
ATOM	4609	OD1	ASN	B	104	-26.550	107.868	-2.958	1.00	65.18	BBBB
ATOM	4610	ND2	ASN	B	104	-24.647	106.740	-3.356	1.00	65.70	BBBB
ATOM	4611	C	ASN	B	104	-26.538	105.604	-6.411	1.00	63.62	BBBB
ATOM	4612	O	ASN	B	104	-25.897	105.552	-7.470	1.00	63.94	BBBB
ATOM	4613	N	LYS	B	105	-26.859	104.523	-5.701	1.00	63.06	BBBB
ATOM	4614	CA	LYS	B	105	-26.417	103.181	-6.080	1.00	61.38	BBBB
ATOM	4615	CB	LYS	B	105	-26.846	102.831	-7.505	1.00	62.02	BBBB
ATOM	4616	CG	LYS	B	105	-28.344	102.601	-7.657	1.00	61.80	BBBB
ATOM	4617	CD	LYS	B	105	-28.701	102.207	-9.083	0.01	61.78	BBBB
ATOM	4618	CE	LYS	B	105	-30.195	101.962	-9.235	0.01	61.74	BBBB
ATOM	4619	NZ	LYS	B	105	-30.679	100.858	-8.359	0.01	61.69	BBBB
ATOM	4620	C	LYS	B	105	-24.898	103.198	-5.955	1.00	60.21	BBBB
ATOM	4621	O	LYS	B	105	-24.174	102.496	-6.666	1.00	59.25	BBBB
ATOM	4622	N	THR	B	106	-24.448	104.052	-5.037	1.00	59.07	BBBB
ATOM	4623	CA	THR	B	106	-23.042	104.237	-4.697	1.00	57.55	BBBB
ATOM	4624	CB	THR	B	106	-22.556	105.672	-4.982	1.00	58.42	BBBB
ATOM	4625	OG1	THR	B	106	-22.879	106.036	-6.332	1.00	59.19	BBBB
ATOM	4626	CG2	THR	B	106	-21.037	105.769	-4.769	1.00	59.31	BBBB
ATOM	4627	C	THR	B	106	-22.968	104.004	-3.191	1.00	55.49	BBBB
ATOM	4628	O	THR	B	106	-23.661	104.667	-2.421	1.00	55.67	BBBB
ATOM	4629	N	GLY	B	107	-22.144	103.051	-2.781	1.00	52.89	BBBB
ATOM	4630	CA	GLY	B	107	-22.013	102.746	-1.373	1.00	49.45	BBBB
ATOM	4631	C	GLY	B	107	-20.639	102.188	-1.077	1.00	47.50	BBBB
ATOM	4632	O	GLY	B	107	-19.630	102.757	-1.481	1.00	46.17	BBBB
ATOM	4633	N	LEU	B	108	-20.600	101.063	-0.376	1.00	45.86	BBBB
ATOM	4634	CA	LEU	B	108	-19.336	100.438	-0.026	1.00	43.60	BBBB
ATOM	4635	CB	LEU	B	108	-19.570	99.242	0.897	1.00	42.15	BBBB
ATOM	4636	CG	LEU	B	108	-18.432	98.227	1.000	1.00	41.14	BBBB
ATOM	4637	CD1	LEU	B	108	-17.127	98.909	1.366	1.00	39.74	BBBB
ATOM	4638	CD2	LEU	B	108	-18.810	97.177	2.026	1.00	41.18	BBBB
ATOM	4639	C	LEU	B	108	-18.590	99.985	-1.257	1.00	42.41	BBBB
ATOM	4640	O	LEU	B	108	-18.842	98.916	-1.786	1.00	41.35	BBBB
ATOM	4641	N	LYS	B	109	-17.660	100.802	-1.714	1.00	42.65	BBBB
ATOM	4642	CA	LYS	B	109	-16.894	100.430	-2.888	1.00	44.05	BBBB
ATOM	4643	CB	LYS	B	109	-16.207	101.646	-3.506	1.00	44.44	BBBB
ATOM	4644	CG	LYS	B	109	-15.369	101.315	-4.733	1.00	43.89	BBBB
ATOM	4645	CD	LYS	B	109	-14.668	102.553	-5.276	1.00	44.88	BBBB

ATOM	4646	CE	LYS	B	109	-14.155	102.338	-6.690	1.00	44.55	BBBB
ATOM	4647	NZ	LYS	B	109	-13.262	101.156	-6.782	1.00	45.72	BBBB
ATOM	4648	C	LYS	B	109	-15.832	99.438	-2.485	1.00	44.01	BBBB
ATOM	4649	O	LYS	B	109	-15.910	98.258	-2.804	1.00	44.21	BBBB
ATOM	4650	N	GLU	B	110	-14.849	99.948	-1.755	1.00	43.45	BBBB
ATOM	4651	CA	GLU	B	110	-13.705	99.174	-1.302	1.00	42.15	BBBB
ATOM	4652	CB	GLU	B	110	-12.499	100.113	-1.236	1.00	44.41	BBBB
ATOM	4653	CG	GLU	B	110	-12.429	101.043	-2.443	1.00	45.27	BBBB
ATOM	4654	CD	GLU	B	110	-11.155	101.840	-2.499	1.00	45.98	BBBB
ATOM	4655	OE1	GLU	B	110	-10.935	102.530	-3.516	1.00	46.78	BBBB
ATOM	4656	OE2	GLU	B	110	-10.376	101.777	-1.528	1.00	47.33	BBBB
ATOM	4657	C	GLU	B	110	-13.877	98.433	0.028	1.00	39.19	BBBB
ATOM	4658	O	GLU	B	110	-14.415	98.961	0.995	1.00	38.49	BBBB
ATOM	4659	N	LEU	B	111	-13.419	97.192	0.053	1.00	35.88	BBBB
ATOM	4660	CA	LEU	B	111	-13.503	96.375	1.242	1.00	33.93	BBBB
ATOM	4661	CB	LEU	B	111	-14.798	95.556	1.275	1.00	33.47	BBBB
ATOM	4662	CG	LEU	B	111	-14.943	94.609	2.486	1.00	34.35	BBBB
ATOM	4663	CD1	LEU	B	111	-15.289	95.403	3.739	1.00	35.21	BBBB
ATOM	4664	CD2	LEU	B	111	-16.028	93.574	2.232	1.00	35.17	BBBB
ATOM	4665	C	LEU	B	111	-12.331	95.433	1.182	1.00	33.20	BBBB
ATOM	4666	O	LEU	B	111	-12.515	94.234	1.041	1.00	33.76	BBBB
ATOM	4667	N	PRO	B	112	-11.106	95.969	1.261	1.00	32.33	BBBB
ATOM	4668	CD	PRO	B	112	-10.816	97.412	1.348	1.00	31.53	BBBB
ATOM	4669	CA	PRO	B	112	-9.866	95.194	1.219	1.00	32.24	BBBB
ATOM	4670	CB	PRO	B	112	-8.860	96.149	1.829	1.00	32.01	BBBB
ATOM	4671	CG	PRO	B	112	-9.298	97.460	1.245	1.00	31.38	BBBB
ATOM	4672	C	PRO	B	112	-9.923	93.852	1.941	1.00	33.17	BBBB
ATOM	4673	O	PRO	B	112	-10.755	93.004	1.612	1.00	35.31	BBBB
ATOM	4674	N	MET	B	113	-9.033	93.660	2.913	1.00	32.53	BBBB
ATOM	4675	CA	MET	B	113	-8.937	92.415	3.700	1.00	30.34	BBBB
ATOM	4676	CB	MET	B	113	-10.292	91.681	3.784	1.00	28.44	BBBB
ATOM	4677	CG	MET	B	113	-11.379	92.494	4.464	1.00	29.23	BBBB
ATOM	4678	SD	MET	B	113	-12.740	91.545	5.198	1.00	32.50	BBBB
ATOM	4679	CE	MET	B	113	-13.524	90.856	3.758	1.00	32.26	BBBB
ATOM	4680	C	MET	B	113	-7.867	91.490	3.119	1.00	28.17	BBBB
ATOM	4681	O	MET	B	113	-8.056	90.293	2.978	1.00	26.31	BBBB
ATOM	4682	N	ARG	B	114	-6.725	92.078	2.799	1.00	27.84	BBBB
ATOM	4683	CA	ARG	B	114	-5.601	91.344	2.229	1.00	27.45	BBBB
ATOM	4684	CB	ARG	B	114	-4.462	92.307	1.892	1.00	27.05	BBBB
ATOM	4685	CG	ARG	B	114	-4.308	93.461	2.856	1.00	28.29	BBBB
ATOM	4686	CD	ARG	B	114	-3.207	94.339	2.375	1.00	29.35	BBBB
ATOM	4687	NE	ARG	B	114	-3.400	95.729	2.743	1.00	31.73	BBBB
ATOM	4688	CZ	ARG	B	114	-2.844	96.744	2.090	1.00	34.77	BBBB
ATOM	4689	NH1	ARG	B	114	-2.065	96.516	1.036	1.00	36.73	BBBB
ATOM	4690	NH2	ARG	B	114	-3.062	97.987	2.488	1.00	36.30	BBBB
ATOM	4691	C	ARG	B	114	-5.051	90.239	3.097	1.00	26.64	BBBB
ATOM	4692	O	ARG	B	114	-4.311	89.388	2.615	1.00	26.63	BBBB
ATOM	4693	N	ASN	B	115	-5.418	90.256	4.374	1.00	26.37	BBBB
ATOM	4694	CA	ASN	B	115	-4.933	89.277	5.336	1.00	23.71	BBBB
ATOM	4695	CB	ASN	B	115	-4.280	90.003	6.512	1.00	23.92	BBBB
ATOM	4696	CG	ASN	B	115	-2.920	90.595	6.165	1.00	25.72	BBBB
ATOM	4697	OD1	ASN	B	115	-1.983	89.868	5.828	1.00	26.29	BBBB
ATOM	4698	ND2	ASN	B	115	-2.803	91.921	6.258	1.00	25.65	BBBB
ATOM	4699	C	ASN	B	115	-5.991	88.320	5.873	1.00	23.67	BBBB
ATOM	4700	O	ASN	B	115	-5.656	87.426	6.633	1.00	25.58	BBBB
ATOM	4701	N	LEU	B	116	-7.253	88.483	5.486	1.00	21.08	BBBB
ATOM	4702	CA	LEU	B	116	-8.297	87.609	6.000	1.00	20.01	BBBB
ATOM	4703	CB	LEU	B	116	-9.662	88.106	5.564	1.00	18.10	BBBB
ATOM	4704	CG	LEU	B	116	-10.780	87.124	5.883	1.00	18.75	BBBB
ATOM	4705	CD1	LEU	B	116	-10.801	86.836	7.383	1.00	19.96	BBBB
ATOM	4706	CD2	LEU	B	116	-12.094	87.687	5.405	1.00	20.04	BBBB
ATOM	4707	C	LEU	B	116	-8.138	86.156	5.581	1.00	21.08	BBBB
ATOM	4708	O	LEU	B	116	-8.903	85.665	4.767	1.00	22.30	BBBB
ATOM	4709	N	GLN	B	117	-7.185	85.449	6.181	1.00	21.80	BBBB
ATOM	4710	CA	GLN	B	117	-6.917	84.066	5.806	1.00	22.85	BBBB
ATOM	4711	CB	GLN	B	117	-5.436	83.806	5.963	1.00	21.93	BBBB
ATOM	4712	CG	GLN	B	117	-4.651	84.332	4.803	1.00	23.78	BBBB
ATOM	4713	CD	GLN	B	117	-3.222	84.593	5.164	1.00	26.93	BBBB
ATOM	4714	OE1	GLN	B	117	-2.364	84.715	4.289	1.00	28.65	BBBB
ATOM	4715	NE2	GLN	B	117	-2.946	84.689	6.463	1.00	27.42	BBBB
ATOM	4716	C	GLN	B	117	-7.694	82.878	6.376	1.00	24.58	BBBB
ATOM	4717	O	GLN	B	117	-7.476	81.754	5.952	1.00	22.81	BBBB
ATOM	4718	N	GLU	B	118	-8.616	83.096	7.304	1.00	27.40	BBBB
ATOM	4719	CA	GLU	B	118	-9.345	81.957	7.835	1.00	28.21	BBBB
ATOM	4720	CB	GLU	B	118	-8.381	81.113	8.662	1.00	29.93	BBBB

ATOM	4721	CG	GLU	B	118	-8.858	79.719	9.000	1.00	31.35	BBBB
ATOM	4722	CD	GLU	B	118	-7.698	78.792	9.280	1.00	31.94	BBBB
ATOM	4723	OE1	GLU	B	118	-6.639	79.288	9.726	1.00	30.29	BBBB
ATOM	4724	OE2	GLU	B	118	-7.850	77.571	9.060	1.00	32.05	BBBB
ATOM	4725	C	GLU	B	118	-10.579	82.316	8.653	1.00	28.82	BBBB
ATOM	4726	O	GLU	B	118	-10.564	83.264	9.437	1.00	27.89	BBBB
ATOM	4727	N	ILE	B	119	-11.644	81.542	8.451	1.00	29.00	BBBB
ATOM	4728	CA	ILE	B	119	-12.899	81.733	9.158	1.00	30.13	BBBB
ATOM	4729	CB	ILE	B	119	-14.043	82.008	8.161	1.00	30.73	BBBB
ATOM	4730	CG2	ILE	B	119	-15.410	81.871	8.818	1.00	29.11	BBBB
ATOM	4731	CG1	ILE	B	119	-13.873	83.423	7.606	1.00	31.20	BBBB
ATOM	4732	CD1	ILE	B	119	-15.025	83.901	6.720	1.00	33.03	BBBB
ATOM	4733	C	ILE	B	119	-13.215	80.538	10.070	1.00	32.02	BBBB
ATOM	4734	O	ILE	B	119	-14.256	80.492	10.725	1.00	35.25	BBBB
ATOM	4735	N	LEU	B	120	-12.304	79.576	10.122	1.00	30.70	BBBB
ATOM	4736	CA	LEU	B	120	-12.440	78.424	11.003	1.00	29.36	BBBB
ATOM	4737	CB	LEU	B	120	-11.782	78.741	12.354	1.00	26.65	BBBB
ATOM	4738	CG	LEU	B	120	-10.266	78.973	12.412	1.00	26.71	BBBB
ATOM	4739	CD1	LEU	B	120	-9.941	79.871	13.566	1.00	29.59	BBBB
ATOM	4740	CD2	LEU	B	120	-9.514	77.686	12.564	1.00	24.64	BBBB
ATOM	4741	C	LEU	B	120	-13.822	77.836	11.283	1.00	30.59	BBBB
ATOM	4742	O	LEU	B	120	-14.043	76.661	11.032	1.00	30.96	BBBB
ATOM	4743	N	HIS	B	121	-14.748	78.627	11.816	1.00	32.28	BBBB
ATOM	4744	CA	HIS	B	121	-16.060	78.088	12.185	1.00	35.58	BBBB
ATOM	4745	CB	HIS	B	121	-16.207	78.091	13.713	1.00	38.34	BBBB
ATOM	4746	CG	HIS	B	121	-15.611	76.897	14.392	1.00	41.79	BBBB
ATOM	4747	CD2	HIS	B	121	-14.577	76.789	15.260	1.00	43.37	BBBB
ATOM	4748	ND1	HIS	B	121	-16.108	75.622	14.226	1.00	43.65	BBBB
ATOM	4749	CE1	HIS	B	121	-15.406	74.779	14.964	1.00	45.70	BBBB
ATOM	4750	NE2	HIS	B	121	-14.470	75.461	15.602	1.00	45.62	BBBB
ATOM	4751	C	HIS	B	121	-17.346	78.667	11.620	1.00	36.38	BBBB
ATOM	4752	O	HIS	B	121	-18.371	78.604	12.286	1.00	37.10	BBBB
ATOM	4753	N	GLY	B	122	-17.339	79.214	10.415	1.00	36.03	BBBB
ATOM	4754	CA	GLY	B	122	-18.590	79.736	9.907	1.00	35.09	BBBB
ATOM	4755	C	GLY	B	122	-18.693	79.866	8.405	1.00	36.37	BBBB
ATOM	4756	O	GLY	B	122	-17.748	79.597	7.661	1.00	37.21	BBBB
ATOM	4757	N	ALA	B	123	-19.869	80.292	7.965	1.00	36.72	BBBB
ATOM	4758	CA	ALA	B	123	-20.145	80.504	6.554	1.00	36.19	BBBB
ATOM	4759	CB	ALA	B	123	-21.547	79.994	6.224	1.00	37.17	BBBB
ATOM	4760	C	ALA	B	123	-20.031	82.004	6.243	1.00	35.85	BBBB
ATOM	4761	O	ALA	B	123	-19.727	82.810	7.120	1.00	34.87	BBBB
ATOM	4762	N	VAL	B	124	-20.270	82.381	4.995	1.00	35.77	BBBB
ATOM	4763	CA	VAL	B	124	-20.181	83.780	4.616	1.00	34.52	BBBB
ATOM	4764	CB	VAL	B	124	-18.941	84.033	3.758	1.00	33.54	BBBB
ATOM	4765	CG1	VAL	B	124	-18.766	85.521	3.551	1.00	33.69	BBBB
ATOM	4766	CG2	VAL	B	124	-17.714	83.422	4.414	1.00	32.10	BBBB
ATOM	4767	C	VAL	B	124	-21.399	84.184	3.813	1.00	34.54	BBBB
ATOM	4768	O	VAL	B	124	-22.051	83.339	3.217	1.00	35.21	BBBB
ATOM	4769	N	ARG	B	125	-21.727	85.469	3.813	1.00	34.77	BBBB
ATOM	4770	CA	ARG	B	125	-22.860	85.949	3.026	1.00	34.46	BBBB
ATOM	4771	CB	ARG	B	125	-24.193	85.858	3.767	1.00	35.42	BBBB
ATOM	4772	CG	ARG	B	125	-25.239	86.703	3.055	1.00	35.09	BBBB
ATOM	4773	CD	ARG	B	125	-26.676	86.476	3.450	1.00	35.51	BBBB
ATOM	4774	NE	ARG	B	125	-27.496	87.392	2.664	1.00	37.85	BBBB
ATOM	4775	CZ	ARG	B	125	-28.824	87.439	2.662	1.00	39.13	BBBB
ATOM	4776	NH1	ARG	B	125	-29.537	86.610	3.413	1.00	38.70	BBBB
ATOM	4777	NH2	ARG	B	125	-29.440	88.342	1.911	1.00	40.21	BBBB
ATOM	4778	C	ARG	B	125	-22.714	87.372	2.576	1.00	33.62	BBBB
ATOM	4779	O	ARG	B	125	-22.412	88.254	3.373	1.00	33.19	BBBB
ATOM	4780	N	PHE	B	126	-22.951	87.580	1.286	1.00	33.29	BBBB
ATOM	4781	CA	PHE	B	126	-22.896	88.900	0.682	1.00	32.29	BBBB
ATOM	4782	CB	PHE	B	126	-21.764	88.992	-0.325	1.00	29.34	BBBB
ATOM	4783	CG	PHE	B	126	-20.422	89.140	0.304	1.00	28.13	BBBB
ATOM	4784	CD1	PHE	B	126	-19.916	88.149	1.129	1.00	27.75	BBBB
ATOM	4785	CD2	PHE	B	126	-19.662	90.275	0.080	1.00	28.31	BBBB
ATOM	4786	CE1	PHE	B	126	-18.670	88.286	1.719	1.00	28.12	BBBB
ATOM	4787	CE2	PHE	B	126	-18.415	90.426	0.664	1.00	28.55	BBBB
ATOM	4788	CZ	PHE	B	126	-17.917	89.429	1.486	1.00	29.40	BBBB
ATOM	4789	C	PHE	B	126	-24.214	89.120	-0.010	1.00	33.13	BBBB
ATOM	4790	O	PHE	B	126	-24.899	88.167	-0.373	1.00	35.30	BBBB
ATOM	4791	N	SER	B	127	-24.582	90.379	-0.172	1.00	33.96	BBBB
ATOM	4792	CA	SER	B	127	-25.831	90.720	-0.830	1.00	34.09	BBBB
ATOM	4793	CB	SER	B	127	-27.014	90.202	-0.005	1.00	33.72	BBBB
ATOM	4794	OG	SER	B	127	-28.251	90.569	-0.595	1.00	35.60	BBBB
ATOM	4795	C	SER	B	127	-25.933	92.231	-1.025	1.00	34.02	BBBB

ATOM	4796	O	SER	B	127	-25.367	93.013	-0.261	1.00	34.13	BBBB
ATOM	4797	N	ASN	B	128	-26.648	92.629	-2.065	1.00	33.90	BBBB
ATOM	4798	CA	ASN	B	128	-26.842	94.030	-2.372	1.00	34.74	BBBB
ATOM	4799	CB	ASN	B	128	-28.064	94.561	-1.623	1.00	35.36	BBBB
ATOM	4800	CG	ASN	B	128	-29.340	93.875	-2.035	1.00	37.33	BBBB
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ATOM	4802	ND2	ASN	B	128	-29.233	92.898	-2.924	1.00	37.39	BBBB
ATOM	4803	C	ASN	B	128	-25.642	94.912	-2.055	1.00	34.61	BBBB
ATOM	4804	O	ASN	B	128	-25.648	95.627	-1.056	1.00	35.63	BBBB
ATOM	4805	N	ASN	B	129	-24.616	94.875	-2.898	1.00	34.17	BBBB
ATOM	4806	CA	ASN	B	129	-23.448	95.717	-2.677	1.00	34.40	BBBB
ATOM	4807	CB	ASN	B	129	-22.248	94.865	-2.259	1.00	35.67	BBBB
ATOM	4808	CG	ASN	B	129	-22.512	94.060	-0.982	1.00	37.21	BBBB
ATOM	4809	OD1	ASN	B	129	-22.867	94.615	0.064	1.00	37.09	BBBB
ATOM	4810	ND2	ASN	B	129	-22.334	92.743	-1.069	1.00	35.86	BBBB
ATOM	4811	C	ASN	B	129	-23.150	96.469	-3.964	1.00	34.36	BBBB
ATOM	4812	O	ASN	B	129	-22.025	96.504	-4.432	1.00	34.85	BBBB
ATOM	4813	N	PRO	B	130	-24.171	97.116	-4.537	1.00	34.16	BBBB
ATOM	4814	CD	PRO	B	130	-25.441	97.436	-3.860	1.00	35.11	BBBB
ATOM	4815	CA	PRO	B	130	-24.073	97.876	-5.776	1.00	32.90	BBBB
ATOM	4816	CB	PRO	B	130	-25.065	99.003	-5.552	1.00	32.71	BBBB
ATOM	4817	CG	PRO	B	130	-26.175	98.278	-4.904	1.00	33.30	BBBB
ATOM	4818	C	PRO	B	130	-22.724	98.367	-6.228	1.00	31.92	BBBB
ATOM	4819	O	PRO	B	130	-22.416	98.288	-7.403	1.00	33.97	BBBB
ATOM	4820	N	ALA	B	131	-21.904	98.875	-5.333	1.00	30.35	BBBB
ATOM	4821	CA	ALA	B	131	-20.624	99.376	-5.789	1.00	31.05	BBBB
ATOM	4822	CB	ALA	B	131	-20.498	100.822	-5.436	1.00	30.21	BBBB
ATOM	4823	C	ALA	B	131	-19.453	98.600	-5.233	1.00	32.96	BBBB
ATOM	4824	O	ALA	B	131	-18.301	99.037	-5.326	1.00	33.16	BBBB
ATOM	4825	N	LEU	B	132	-19.743	97.445	-4.643	1.00	34.48	BBBB
ATOM	4826	CA	LEU	B	132	-18.679	96.627	-4.080	1.00	34.95	BBBB
ATOM	4827	CB	LEU	B	132	-19.165	95.672	-2.980	1.00	32.42	BBBB
ATOM	4828	CG	LEU	B	132	-18.010	94.764	-2.523	1.00	29.87	BBBB
ATOM	4829	CD1	LEU	B	132	-16.936	95.623	-1.939	1.00	28.98	BBBB
ATOM	4830	CD2	LEU	B	132	-18.451	93.758	-1.510	1.00	28.40	BBBB
ATOM	4831	C	LEU	B	132	-18.103	95.797	-5.176	1.00	36.25	BBBB
ATOM	4832	O	LEU	B	132	-18.769	94.919	-5.718	1.00	37.53	BBBB
ATOM	4833	N	CYS	B	133	-16.868	96.085	-5.526	1.00	36.96	BBBB
ATOM	4834	CA	CYS	B	133	-16.243	95.290	-6.536	1.00	38.86	BBBB
ATOM	4835	C	CYS	B	133	-14.774	95.150	-6.202	1.00	37.68	BBBB
ATOM	4836	O	CYS	B	133	-14.241	95.923	-5.403	1.00	37.29	BBBB
ATOM	4837	CB	CYS	B	133	-16.485	95.885	-7.932	1.00	40.82	BBBB
ATOM	4838	SG	CYS	B	133	-16.265	97.674	-8.150	1.00	44.61	BBBB
ATOM	4839	N	ASN	B	134	-14.157	94.134	-6.807	1.00	36.19	BBBB
ATOM	4840	CA	ASN	B	134	-12.760	93.775	-6.631	1.00	33.27	BBBB
ATOM	4841	CB	ASN	B	134	-12.007	94.861	-5.879	1.00	31.51	BBBB
ATOM	4842	CG	ASN	B	134	-10.603	95.025	-6.361	1.00	30.41	BBBB
ATOM	4843	OD1	ASN	B	134	-10.146	94.278	-7.212	1.00	29.79	BBBB
ATOM	4844	ND2	ASN	B	134	-9.900	96.007	-5.816	1.00	30.43	BBBB
ATOM	4845	C	ASN	B	134	-12.810	92.504	-5.800	1.00	33.10	BBBB
ATOM	4846	O	ASN	B	134	-12.048	91.577	-6.008	1.00	33.37	BBBB
ATOM	4847	N	VAL	B	135	-13.759	92.469	-4.878	1.00	34.08	BBBB
ATOM	4848	CA	VAL	B	135	-13.946	91.343	-3.978	1.00	34.75	BBBB
ATOM	4849	CB	VAL	B	135	-14.803	91.768	-2.750	1.00	33.75	BBBB
ATOM	4850	CG1	VAL	B	135	-15.024	90.608	-1.815	1.00	30.86	BBBB
ATOM	4851	CG2	VAL	B	135	-14.119	92.902	-2.021	1.00	34.17	BBBB
ATOM	4852	C	VAL	B	135	-14.585	90.119	-4.624	1.00	36.09	BBBB
ATOM	4853	O	VAL	B	135	-14.570	89.046	-4.034	1.00	37.44	BBBB
ATOM	4854	N	GLU	B	136	-15.140	90.244	-5.825	1.00	36.71	BBBB
ATOM	4855	CA	GLU	B	136	-15.766	89.064	-6.430	1.00	37.89	BBBB
ATOM	4856	CB	GLU	B	136	-16.842	89.449	-7.460	1.00	39.78	BBBB
ATOM	4857	CG	GLU	B	136	-16.338	89.765	-8.868	1.00	42.51	BBBB
ATOM	4858	CD	GLU	B	136	-15.324	90.895	-8.891	1.00	45.89	BBBB
ATOM	4859	OE1	GLU	B	136	-15.501	91.863	-8.114	1.00	46.36	BBBB
ATOM	4860	OE2	GLU	B	136	-14.361	90.822	-9.691	1.00	46.51	BBBB
ATOM	4861	C	GLU	B	136	-14.752	88.136	-7.086	1.00	36.94	BBBB
ATOM	4862	O	GLU	B	136	-15.128	87.112	-7.661	1.00	36.97	BBBB
ATOM	4863	N	SER	B	137	-13.473	88.490	-6.996	1.00	34.58	BBBB
ATOM	4864	CA	SER	B	137	-12.431	87.665	-7.583	1.00	33.86	BBBB
ATOM	4865	CB	SER	B	137	-11.259	88.528	-8.058	1.00	33.86	BBBB
ATOM	4866	OG	SER	B	137	-10.498	89.042	-6.978	1.00	32.28	BBBB
ATOM	4867	C	SER	B	137	-11.934	86.679	-6.547	1.00	34.55	BBBB
ATOM	4868	O	SER	B	137	-11.411	85.614	-6.872	1.00	33.34	BBBB
ATOM	4869	N	ILE	B	138	-12.130	87.047	-5.289	1.00	35.32	BBBB
ATOM	4870	CA	ILE	B	138	-11.682	86.258	-4.158	1.00	35.50	BBBB

ATOM	4871	CB	ILE	B	138	-12.109	86.947	-2.838	1.00	34.65	BBBB
ATOM	4872	CG2	ILE	B	138	-11.845	86.033	-1.627	1.00	35.95	BBBB
ATOM	4873	CG1	ILE	B	138	-11.355	88.272	-2.697	1.00	32.21	BBBB
ATOM	4874	CD1	ILE	B	138	-9.859	88.130	-2.692	1.00	28.69	BBBB
ATOM	4875	C	ILE	B	138	-12.107	84.798	-4.147	1.00	37.00	BBBB
ATOM	4876	O	ILE	B	138	-13.256	84.463	-4.461	1.00	36.56	BBBB
ATOM	4877	N	GLN	B	139	-11.146	83.948	-3.772	1.00	38.84	BBBB
ATOM	4878	CA	GLN	B	139	-11.312	82.497	-3.666	1.00	40.84	BBBB
ATOM	4879	CB	GLN	B	139	-10.078	81.791	-4.249	1.00	40.90	BBBB
ATOM	4880	CG	GLN	B	139	-9.579	82.400	-5.567	1.00	41.41	BBBB
ATOM	4881	CD	GLN	B	139	-8.432	81.635	-6.210	1.00	41.07	BBBB
ATOM	4882	OE1	GLN	B	139	-8.538	80.433	-6.471	1.00	41.57	BBBB
ATOM	4883	NE2	GLN	B	139	-7.335	82.336	-6.487	1.00	38.33	BBBB
ATOM	4884	C	GLN	B	139	-11.438	82.171	-2.177	1.00	42.45	BBBB
ATOM	4885	O	GLN	B	139	-10.437	82.122	-1.457	1.00	43.33	BBBB
ATOM	4886	N	TRP	B	140	-12.664	81.962	-1.708	1.00	43.74	BBBB
ATOM	4887	CA	TRP	B	140	-12.887	81.672	-0.293	1.00	44.19	BBBB
ATOM	4888	CB	TRP	B	140	-14.308	82.069	0.114	1.00	44.20	BBBB
ATOM	4889	CG	TRP	B	140	-14.653	83.454	-0.299	1.00	44.14	BBBB
ATOM	4890	CD2	TRP	B	140	-14.638	84.623	0.524	1.00	44.35	BBBB
ATOM	4891	CE2	TRP	B	140	-14.946	85.717	-0.302	1.00	44.28	BBBB
ATOM	4892	CE3	TRP	B	140	-14.391	84.851	1.882	1.00	44.70	BBBB
ATOM	4893	CD1	TRP	B	140	-14.965	83.872	-1.551	1.00	43.97	BBBB
ATOM	4894	NE1	TRP	B	140	-15.141	85.229	-1.565	1.00	44.77	BBBB
ATOM	4895	CZ2	TRP	B	140	-15.015	87.026	0.178	1.00	44.72	BBBB
ATOM	4896	CZ3	TRP	B	140	-14.460	86.152	2.360	1.00	45.61	BBBB
ATOM	4897	CH2	TRP	B	140	-14.770	87.224	1.507	1.00	44.76	BBBB
ATOM	4898	C	TRP	B	140	-12.653	80.208	0.032	1.00	45.26	BBBB
ATOM	4899	O	TRP	B	140	-12.538	79.836	1.203	1.00	46.55	BBBB
ATOM	4900	N	ARG	B	141	-12.584	79.377	-1.005	1.00	45.56	BBBB
ATOM	4901	CA	ARG	B	141	-12.349	77.948	-0.830	1.00	44.51	BBBB
ATOM	4902	CB	ARG	B	141	-12.304	77.243	-2.185	1.00	45.58	BBBB
ATOM	4903	CG	ARG	B	141	-13.584	77.349	-3.005	1.00	47.73	BBBB
ATOM	4904	CD	ARG	B	141	-13.835	78.759	-3.517	0.01	47.18	BBBB
ATOM	4905	NE	ARG	B	141	-15.026	78.819	-4.361	0.01	47.51	BBBB
ATOM	4906	CZ	ARG	B	141	-15.472	79.923	-4.950	0.01	47.52	BBBB
ATOM	4907	NH1	ARG	B	141	-14.827	81.071	-4.791	0.01	47.70	BBBB
ATOM	4908	NH2	ARG	B	141	-16.563	79.880	-5.702	0.01	47.69	BBBB
ATOM	4909	C	ARG	B	141	-11.025	77.744	-0.116	1.00	42.95	BBBB
ATOM	4910	O	ARG	B	141	-10.695	76.629	0.266	1.00	43.95	BBBB
ATOM	4911	N	ASP	B	142	-10.284	78.838	0.053	1.00	41.08	BBBB
ATOM	4912	CA	ASP	B	142	-8.985	78.854	0.708	1.00	39.12	BBBB
ATOM	4913	CB	ASP	B	142	-7.958	79.482	-0.218	1.00	38.57	BBBB
ATOM	4914	CG	ASP	B	142	-6.623	79.732	0.457	1.00	39.74	BBBB
ATOM	4915	OD1	ASP	B	142	-6.517	80.621	1.330	1.00	39.81	BBBB
ATOM	4916	OD2	ASP	B	142	-5.662	79.035	0.098	1.00	41.04	BBBB
ATOM	4917	C	ASP	B	142	-9.053	79.657	1.994	1.00	40.42	BBBB
ATOM	4918	O	ASP	B	142	-8.059	79.772	2.708	1.00	40.99	BBBB
ATOM	4919	N	ILE	B	143	-10.222	80.223	2.283	1.00	40.85	BBBB
ATOM	4920	CA	ILE	B	143	-10.417	81.016	3.496	1.00	41.02	BBBB
ATOM	4921	CB	ILE	B	143	-10.918	82.461	3.184	1.00	42.31	BBBB
ATOM	4922	CG2	ILE	B	143	-11.212	83.209	4.493	1.00	41.33	BBBB
ATOM	4923	CG1	ILE	B	143	-9.878	83.220	2.352	1.00	42.58	BBBB
ATOM	4924	CD1	ILE	B	143	-10.247	84.664	2.084	1.00	43.21	BBBB
ATOM	4925	C	ILE	B	143	-11.454	80.347	4.370	1.00	40.65	BBBB
ATOM	4926	O	ILE	B	143	-11.268	80.214	5.570	1.00	39.98	BBBB
ATOM	4927	N	VAL	B	144	-12.551	79.935	3.750	1.00	42.22	BBBB
ATOM	4928	CA	VAL	B	144	-13.642	79.278	4.455	1.00	45.17	BBBB
ATOM	4929	CB	VAL	B	144	-14.903	79.173	3.567	1.00	44.81	BBBB
ATOM	4930	CG1	VAL	B	144	-16.079	78.670	4.376	1.00	44.30	BBBB
ATOM	4931	CG2	VAL	B	144	-15.219	80.519	2.966	1.00	44.73	BBBB
ATOM	4932	C	VAL	B	144	-13.228	77.873	4.870	1.00	47.26	BBBB
ATOM	4933	O	VAL	B	144	-12.138	77.406	4.540	1.00	48.17	BBBB
ATOM	4934	N	SER	B	145	-14.095	77.199	5.606	1.00	48.93	BBBB
ATOM	4935	CA	SER	B	145	-13.782	75.856	6.029	1.00	51.89	BBBB
ATOM	4936	CB	SER	B	145	-13.849	75.747	7.550	1.00	52.59	BBBB
ATOM	4937	OG	SER	B	145	-12.854	76.567	8.152	1.00	52.75	BBBB
ATOM	4938	C	SER	B	145	-14.758	74.909	5.368	1.00	53.79	BBBB
ATOM	4939	O	SER	B	145	-15.972	75.035	5.522	1.00	54.40	BBBB
ATOM	4940	N	SER	B	146	-14.196	73.972	4.613	1.00	55.17	BBBB
ATOM	4941	CA	SER	B	146	-14.951	72.972	3.877	1.00	56.16	BBBB
ATOM	4942	CB	SER	B	146	-13.993	71.892	3.378	1.00	57.15	BBBB
ATOM	4943	OG	SER	B	146	-12.963	72.471	2.588	1.00	58.43	BBBB
ATOM	4944	C	SER	B	146	-16.090	72.351	4.674	1.00	56.60	BBBB
ATOM	4945	O	SER	B	146	-17.074	71.898	4.102	1.00	56.19	BBBB

ATOM	4946	N	ASP	B	147	-15.961	72.326	5.992	1.00	57.72	BBBB
ATOM	4947	CA	ASP	B	147	-17.012	71.777	6.829	1.00	59.28	BBBB
ATOM	4948	CB	ASP	B	147	-16.678	72.028	8.304	1.00	62.44	BBBB
ATOM	4949	CG	ASP	B	147	-17.789	71.585	9.255	1.00	65.38	BBBB
ATOM	4950	OD1	ASP	B	147	-17.539	71.528	10.483	1.00	66.01	BBBB
ATOM	4951	OD2	ASP	B	147	-18.914	71.302	8.784	1.00	67.63	BBBB
ATOM	4952	C	ASP	B	147	-18.312	72.473	6.441	1.00	59.67	BBBB
ATOM	4953	O	ASP	B	147	-19.395	71.896	6.528	1.00	59.68	BBBB
ATOM	4954	N	PHE	B	148	-18.190	73.720	5.996	1.00	60.72	BBBB
ATOM	4955	CA	PHE	B	148	-19.346	74.520	5.582	1.00	61.18	BBBB
ATOM	4956	CB	PHE	B	148	-19.207	75.946	6.123	1.00	60.23	BBBB
ATOM	4957	CG	PHE	B	148	-19.477	76.057	7.590	1.00	59.20	BBBB
ATOM	4958	CD1	PHE	B	148	-18.668	75.406	8.510	1.00	59.14	BBBB
ATOM	4959	CD2	PHE	B	148	-20.571	76.772	8.053	1.00	58.88	BBBB
ATOM	4960	CE1	PHE	B	148	-18.947	75.460	9.871	1.00	58.45	BBBB
ATOM	4961	CE2	PHE	B	148	-20.855	76.830	9.406	1.00	58.65	BBBB
ATOM	4962	CZ	PHE	B	148	-20.041	76.171	10.317	1.00	58.35	BBBB
ATOM	4963	C	PHE	B	148	-19.545	74.549	4.058	1.00	61.55	BBBB
ATOM	4964	O	PHE	B	148	-20.207	73.670	3.503	1.00	62.14	BBBB
ATOM	4965	N	LEU	B	149	-18.968	75.556	3.398	1.00	60.40	BBBB
ATOM	4966	CA	LEU	B	149	-19.061	75.731	1.948	1.00	58.92	BBBB
ATOM	4967	CB	LEU	B	149	-18.109	74.780	1.229	1.00	57.27	BBBB
ATOM	4968	CG	LEU	B	149	-16.627	75.097	1.396	1.00	57.14	BBBB
ATOM	4969	CD1	LEU	B	149	-15.805	74.166	0.526	1.00	57.13	BBBB
ATOM	4970	CD2	LEU	B	149	-16.369	76.536	1.009	1.00	56.89	BBBB
ATOM	4971	C	LEU	B	149	-20.459	75.560	1.383	1.00	58.92	BBBB
ATOM	4972	O	LEU	B	149	-20.996	76.481	0.778	1.00	59.99	BBBB
ATOM	4973	N	SER	B	150	-21.042	74.381	1.567	1.00	58.35	BBBB
ATOM	4974	CA	SER	B	150	-22.385	74.101	1.078	1.00	57.76	BBBB
ATOM	4975	CB	SER	B	150	-22.783	72.660	1.394	1.00	57.70	BBBB
ATOM	4976	OG	SER	B	150	-22.975	72.474	2.786	1.00	56.56	BBBB
ATOM	4977	C	SER	B	150	-23.367	75.043	1.752	1.00	58.01	BBBB
ATOM	4978	O	SER	B	150	-24.576	74.901	1.599	1.00	57.85	BBBB
ATOM	4979	N	ASN	B	151	-22.837	75.991	2.517	1.00	58.23	BBBB
ATOM	4980	CA	ASN	B	151	-23.660	76.961	3.215	1.00	58.34	BBBB
ATOM	4981	CB	ASN	B	151	-23.518	76.786	4.727	1.00	61.08	BBBB
ATOM	4982	CG	ASN	B	151	-24.532	75.819	5.286	1.00	64.76	BBBB
ATOM	4983	OD1	ASN	B	151	-25.734	75.994	5.078	1.00	66.18	BBBB
ATOM	4984	ND2	ASN	B	151	-24.067	74.798	5.995	1.00	68.28	BBBB
ATOM	4985	C	ASN	B	151	-23.302	78.379	2.809	1.00	57.06	BBBB
ATOM	4986	O	ASN	B	151	-23.983	79.336	3.185	1.00	56.28	BBBB
ATOM	4987	N	MET	B	152	-22.226	78.512	2.042	1.00	55.26	BBBB
ATOM	4988	CA	MET	B	152	-21.810	79.817	1.564	1.00	54.04	BBBB
ATOM	4989	CB	MET	B	152	-20.657	79.681	0.569	1.00	52.39	BBBB
ATOM	4990	CG	MET	B	152	-19.334	79.323	1.194	1.00	50.21	BBBB
ATOM	4991	SD	MET	B	152	-18.694	80.687	2.142	1.00	49.00	BBBB
ATOM	4992	CE	MET	B	152	-17.657	81.443	0.951	1.00	49.22	BBBB
ATOM	4993	C	MET	B	152	-23.019	80.437	0.868	1.00	54.30	BBBB
ATOM	4994	O	MET	B	152	-24.029	79.764	0.643	1.00	53.73	BBBB
ATOM	4995	N	SER	B	153	-22.915	81.719	0.529	1.00	54.23	BBBB
ATOM	4996	CA	SER	B	153	-24.001	82.423	-0.133	1.00	54.16	BBBB
ATOM	4997	CB	SER	B	153	-25.091	82.765	0.883	1.00	53.09	BBBB
ATOM	4998	OG	SER	B	153	-26.141	83.492	0.271	1.00	52.39	BBBB
ATOM	4999	C	SER	B	153	-23.519	83.696	-0.820	1.00	54.91	BBBB
ATOM	5000	O	SER	B	153	-24.154	84.741	-0.690	1.00	54.54	BBBB
ATOM	5001	N	MET	B	154	-22.403	83.600	-1.544	1.00	55.97	BBBB
ATOM	5002	CA	MET	B	154	-21.827	84.738	-2.261	1.00	56.94	BBBB
ATOM	5003	CB	MET	B	154	-20.907	84.252	-3.382	1.00	59.10	BBBB
ATOM	5004	CG	MET	B	154	-19.425	84.240	-3.033	1.00	62.95	BBBB
ATOM	5005	SD	MET	B	154	-18.353	84.258	-4.531	1.00	65.88	BBBB
ATOM	5006	CE	MET	B	154	-17.970	82.464	-4.725	1.00	64.74	BBBB
ATOM	5007	C	MET	B	154	-22.888	85.674	-2.854	1.00	56.45	BBBB
ATOM	5008	O	MET	B	154	-23.581	86.374	-2.113	1.00	57.21	BBBB
ATOM	5009	N	ASP	B	155	-22.989	85.710	-4.183	1.00	54.71	BBBB
ATOM	5010	CA	ASP	B	155	-23.979	86.545	-4.865	1.00	53.29	BBBB
ATOM	5011	CB	ASP	B	155	-25.262	86.610	-4.033	1.00	52.44	BBBB
ATOM	5012	CG	ASP	B	155	-26.404	87.255	-4.768	1.00	53.18	BBBB
ATOM	5013	OD1	ASP	B	155	-26.172	88.232	-5.508	1.00	52.43	BBBB
ATOM	5014	OD2	ASP	B	155	-27.547	86.784	-4.592	1.00	54.88	BBBB
ATOM	5015	C	ASP	B	155	-23.520	87.970	-5.165	1.00	52.38	BBBB
ATOM	5016	O	ASP	B	155	-24.101	88.921	-4.673	1.00	52.08	BBBB
ATOM	5017	N	PHE	B	156	-22.485	88.132	-5.972	1.00	51.63	BBBB
ATOM	5018	CA	PHE	B	156	-22.040	89.478	-6.291	1.00	51.86	BBBB
ATOM	5019	CB	PHE	B	156	-20.529	89.501	-6.529	1.00	52.77	BBBB
ATOM	5020	CG	PHE	B	156	-19.716	89.159	-5.315	1.00	53.41	BBBB

ATOM	5021	CD1	PHE	B	156	-19.827	87.912	-4.711	1.00	54.28	BBBB
ATOM	5022	CD2	PHE	B	156	-18.828	90.084	-4.782	1.00	53.52	BBBB
ATOM	5023	CE1	PHE	B	156	-19.064	87.593	-3.591	1.00	54.40	BBBB
ATOM	5024	CE2	PHE	B	156	-18.058	89.777	-3.664	1.00	54.32	BBBB
ATOM	5025	CZ	PHE	B	156	-18.176	88.529	-3.066	1.00	54.53	BBBB
ATOM	5026	C	PHE	B	156	-22.775	89.969	-7.538	1.00	52.03	BBBB
ATOM	5027	O	PHE	B	156	-23.197	89.169	-8.364	1.00	53.11	BBBB
ATOM	5028	N	GLN	B	157	-22.928	91.281	-7.669	1.00	51.92	BBBB
ATOM	5029	CA	GLN	B	157	-23.615	91.876	-8.810	1.00	51.98	BBBB
ATOM	5030	CB	GLN	B	157	-25.133	91.668	-8.707	1.00	54.05	BBBB
ATOM	5031	CG	GLN	B	157	-25.638	90.229	-8.682	1.00	57.48	BBBB
ATOM	5032	CD	GLN	B	157	-27.155	90.149	-8.533	1.00	59.39	BBBB
ATOM	5033	OE1	GLN	B	157	-27.897	90.618	-9.398	1.00	59.87	BBBB
ATOM	5034	NE2	GLN	B	157	-27.620	89.559	-7.429	1.00	59.30	BBBB
ATOM	5035	C	GLN	B	157	-23.364	93.376	-8.816	1.00	51.05	BBBB
ATOM	5036	O	GLN	B	157	-24.314	94.144	-8.856	1.00	51.40	BBBB
ATOM	5037	N	ASN	B	158	-22.116	93.820	-8.788	1.00	49.87	BBBB
ATOM	5038	CA	ASN	B	158	-21.907	95.260	-8.750	1.00	49.28	BBBB
ATOM	5039	CB	ASN	B	158	-20.423	95.608	-8.548	1.00	50.13	BBBB
ATOM	5040	CG	ASN	B	158	-19.599	95.433	-9.793	1.00	50.17	BBBB
ATOM	5041	OD1	ASN	B	158	-19.954	95.930	-10.863	1.00	51.88	BBBB
ATOM	5042	ND2	ASN	B	158	-18.474	94.744	-9.661	1.00	50.17	BBBB
ATOM	5043	C	ASN	B	158	-22.469	96.011	-9.951	1.00	48.78	BBBB
ATOM	5044	O	ASN	B	158	-22.358	95.585	-11.090	1.00	47.05	BBBB
ATOM	5045	N	HIS	B	159	-23.096	97.143	-9.672	1.00	49.64	BBBB
ATOM	5046	CA	HIS	B	159	-23.682	97.970	-10.713	1.00	50.02	BBBB
ATOM	5047	CB	HIS	B	159	-24.521	99.090	-10.065	1.00	49.70	BBBB
ATOM	5048	CG	HIS	B	159	-25.459	99.774	-11.012	0.01	49.90	BBBB
ATOM	5049	CD2	HIS	B	159	-26.809	99.869	-11.013	0.01	49.85	BBBB
ATOM	5050	ND1	HIS	B	159	-25.026	100.468	-12.121	0.01	49.85	BBBB
ATOM	5051	CE1	HIS	B	159	-26.069	100.960	-12.766	0.01	49.91	BBBB
ATOM	5052	NE2	HIS	B	159	-27.164	100.611	-12.114	0.01	49.91	BBBB
ATOM	5053	C	HIS	B	159	-22.553	98.550	-11.591	1.00	49.32	BBBB
ATOM	5054	O	HIS	B	159	-21.674	97.809	-12.048	1.00	48.41	BBBB
ATOM	5055	N	LEU	B	160	-22.598	99.868	-11.803	1.00	48.50	BBBB
ATOM	5056	CA	LEU	B	160	-21.642	100.639	-12.606	1.00	47.39	BBBB
ATOM	5057	CB	LEU	B	160	-21.259	101.930	-11.861	1.00	47.75	BBBB
ATOM	5058	CG	LEU	B	160	-20.075	102.772	-12.371	1.00	47.73	BBBB
ATOM	5059	CD1	LEU	B	160	-20.138	102.932	-13.885	1.00	47.52	BBBB
ATOM	5060	CD2	LEU	B	160	-20.097	104.136	-11.691	1.00	46.40	BBBB
ATOM	5061	C	LEU	B	160	-20.374	99.943	-13.073	1.00	46.19	BBBB
ATOM	5062	O	LEU	B	160	-20.001	100.065	-14.242	1.00	44.72	BBBB
ATOM	5063	N	GLY	B	161	-19.710	99.243	-12.155	1.00	45.67	BBBB
ATOM	5064	CA	GLY	B	161	-18.481	98.539	-12.479	1.00	43.93	BBBB
ATOM	5065	C	GLY	B	161	-17.313	99.501	-12.539	1.00	42.80	BBBB
ATOM	5066	O	GLY	B	161	-16.625	99.607	-13.560	1.00	43.13	BBBB
ATOM	5067	N	SER	B	162	-17.088	100.215	-11.446	1.00	40.95	BBBB
ATOM	5068	CA	SER	B	162	-16.001	101.173	-11.390	1.00	40.55	BBBB
ATOM	5069	CB	SER	B	162	-16.450	102.417	-10.626	1.00	39.83	BBBB
ATOM	5070	OG	SER	B	162	-16.640	102.120	-9.253	1.00	39.76	BBBB
ATOM	5071	C	SER	B	162	-14.773	100.588	-10.697	1.00	40.51	BBBB
ATOM	5072	O	SER	B	162	-14.179	101.247	-9.847	1.00	41.14	BBBB
ATOM	5073	N	CYS	B	163	-14.365	99.375	-11.052	1.00	39.76	BBBB
ATOM	5074	CA	CYS	B	163	-13.226	98.801	-10.356	1.00	40.83	BBBB
ATOM	5075	C	CYS	B	163	-11.934	98.525	-11.079	1.00	41.06	BBBB
ATOM	5076	O	CYS	B	163	-11.898	97.818	-12.079	1.00	41.55	BBBB
ATOM	5077	CB	CYS	B	163	-13.650	97.546	-9.626	1.00	40.94	BBBB
ATOM	5078	SG	CYS	B	163	-14.267	97.936	-7.965	1.00	44.39	BBBB
ATOM	5079	N	GLN	B	164	-10.857	99.075	-10.530	1.00	40.29	BBBB
ATOM	5080	CA	GLN	B	164	-9.545	98.902	-11.103	1.00	39.13	BBBB
ATOM	5081	CB	GLN	B	164	-8.489	99.402	-10.131	1.00	37.61	BBBB
ATOM	5082	CG	GLN	B	164	-8.602	100.884	-9.866	1.00	36.13	BBBB
ATOM	5083	CD	GLN	B	164	-7.642	101.363	-8.805	1.00	35.58	BBBB
ATOM	5084	OE1	GLN	B	164	-7.888	101.198	-7.613	1.00	35.24	BBBB
ATOM	5085	NE2	GLN	B	164	-6.534	101.951	-9.233	1.00	34.37	BBBB
ATOM	5086	C	GLN	B	164	-9.315	97.446	-11.448	1.00	39.92	BBBB
ATOM	5087	O	GLN	B	164	-10.176	96.597	-11.227	1.00	40.12	BBBB
ATOM	5088	N	LYS	B	165	-8.149	97.166	-12.008	1.00	41.33	BBBB
ATOM	5089	CA	LYS	B	165	-7.787	95.820	-12.419	1.00	41.86	BBBB
ATOM	5090	CB	LYS	B	165	-6.978	95.890	-13.715	1.00	42.37	BBBB
ATOM	5091	CG	LYS	B	165	-6.599	94.565	-14.335	1.00	41.91	BBBB
ATOM	5092	CD	LYS	B	165	-5.888	94.797	-15.654	1.00	42.30	BBBB
ATOM	5093	CE	LYS	B	165	-6.731	95.687	-16.559	1.00	43.35	BBBB
ATOM	5094	NZ	LYS	B	165	-8.155	95.217	-16.651	1.00	43.00	BBBB
ATOM	5095	C	LYS	B	165	-6.926	95.298	-11.309	1.00	41.87	BBBB

ATOM	5096	O	LYS	B	165	-6.250	96.086	-10.654	1.00	42.44	BBBB
ATOM	5097	N	CYS	B	166	-6.938	93.987	-11.087	1.00	41.75	BBBB
ATOM	5098	CA	CYS	B	166	-6.113	93.429	-10.031	1.00	41.08	BBBB
ATOM	5099	C	CYS	B	166	-4.655	93.758	-10.261	1.00	40.70	BBBB
ATOM	5100	O	CYS	B	166	-4.218	94.885	-10.039	1.00	41.03	BBBB
ATOM	5101	CB	CYS	B	166	-6.287	91.920	-9.932	1.00	40.42	BBBB
ATOM	5102	SG	CYS	B	166	-7.729	91.401	-8.950	1.00	44.26	BBBB
ATOM	5103	N	ASP	B	167	-3.903	92.775	-10.722	1.00	40.79	BBBB
ATOM	5104	CA	ASP	B	167	-2.480	92.958	-10.954	1.00	41.92	BBBB
ATOM	5105	CB	ASP	B	167	-1.828	93.534	-9.691	1.00	41.64	BBBB
ATOM	5106	CG	ASP	B	167	-0.335	93.732	-9.833	1.00	43.02	BBBB
ATOM	5107	OD1	ASP	B	167	0.129	94.881	-9.669	1.00	42.93	BBBB
ATOM	5108	OD2	ASP	B	167	0.376	92.737	-10.094	1.00	45.20	BBBB
ATOM	5109	C	ASP	B	167	-1.908	91.583	-11.286	1.00	42.60	BBBB
ATOM	5110	O	ASP	B	167	-1.819	90.716	-10.428	1.00	41.73	BBBB
ATOM	5111	N	PRO	B	168	-1.509	91.379	-12.547	1.00	43.54	BBBB
ATOM	5112	CD	PRO	B	168	-1.304	92.467	-13.521	1.00	43.10	BBBB
ATOM	5113	CA	PRO	B	168	-0.942	90.126	-13.053	1.00	44.71	BBBB
ATOM	5114	CB	PRO	B	168	-0.201	90.581	-14.303	1.00	44.66	BBBB
ATOM	5115	CG	PRO	B	168	-1.050	91.712	-14.783	1.00	43.44	BBBB
ATOM	5116	C	PRO	B	168	-0.024	89.410	-12.054	1.00	44.69	BBBB
ATOM	5117	O	PRO	B	168	1.193	89.358	-12.229	1.00	46.01	BBBB
ATOM	5118	N	SER	B	169	-0.628	88.859	-11.012	1.00	43.58	BBBB
ATOM	5119	CA	SER	B	169	0.092	88.147	-9.969	1.00	43.10	BBBB
ATOM	5120	CB	SER	B	169	0.954	89.096	-9.156	1.00	42.70	BBBB
ATOM	5121	OG	SER	B	169	1.194	88.533	-7.875	1.00	42.99	BBBB
ATOM	5122	C	SER	B	169	-0.934	87.520	-9.058	1.00	42.60	BBBB
ATOM	5123	O	SER	B	169	-0.808	86.382	-8.651	1.00	42.97	BBBB
ATOM	5124	N	CYS	B	170	-1.948	88.289	-8.719	1.00	43.15	BBBB
ATOM	5125	CA	CYS	B	170	-3.008	87.780	-7.885	1.00	45.27	BBBB
ATOM	5126	C	CYS	B	170	-3.466	86.497	-8.586	1.00	46.04	BBBB
ATOM	5127	O	CYS	B	170	-4.116	86.545	-9.622	1.00	46.04	BBBB
ATOM	5128	CB	CYS	B	170	-4.132	88.810	-7.820	1.00	46.60	BBBB
ATOM	5129	SG	CYS	B	170	-3.654	90.467	-7.195	1.00	50.23	BBBB
ATOM	5130	N	PRO	B	171	-3.139	85.331	-8.011	1.00	47.93	BBBB
ATOM	5131	CD	PRO	B	171	-2.945	85.199	-6.557	1.00	48.88	BBBB
ATOM	5132	CA	PRO	B	171	-3.498	84.030	-8.581	1.00	48.68	BBBB
ATOM	5133	CB	PRO	B	171	-3.335	83.083	-7.405	1.00	48.48	BBBB
ATOM	5134	CG	PRO	B	171	-3.732	83.943	-6.253	1.00	48.24	BBBB
ATOM	5135	C	PRO	B	171	-4.900	83.991	-9.122	1.00	50.31	BBBB
ATOM	5136	O	PRO	B	171	-5.797	84.617	-8.570	1.00	52.06	BBBB
ATOM	5137	N	ASN	B	172	-5.090	83.249	-10.203	1.00	51.57	BBBB
ATOM	5138	CA	ASN	B	172	-6.406	83.118	-10.805	1.00	52.37	BBBB
ATOM	5139	CB	ASN	B	172	-7.279	82.206	-9.940	1.00	57.00	BBBB
ATOM	5140	CG	ASN	B	172	-6.732	80.782	-9.844	1.00	61.96	BBBB
ATOM	5141	OD1	ASN	B	172	-5.583	80.567	-9.440	1.00	62.97	BBBB
ATOM	5142	ND2	ASN	B	172	-7.571	79.814	-10.212	1.00	65.64	BBBB
ATOM	5143	C	ASN	B	172	-7.075	84.475	-10.961	1.00	50.70	BBBB
ATOM	5144	O	ASN	B	172	-8.292	84.558	-11.105	1.00	50.92	BBBB
ATOM	5145	N	GLY	B	173	-6.266	85.531	-10.920	1.00	49.23	BBBB
ATOM	5146	CA	GLY	B	173	-6.770	86.885	-11.068	1.00	48.31	BBBB
ATOM	5147	C	GLY	B	173	-7.677	87.370	-9.951	1.00	48.05	BBBB
ATOM	5148	O	GLY	B	173	-8.571	88.189	-10.178	1.00	48.09	BBBB
ATOM	5149	N	SER	B	174	-7.450	86.863	-8.743	1.00	47.52	BBBB
ATOM	5150	CA	SER	B	174	-8.240	87.247	-7.580	1.00	45.85	BBBB
ATOM	5151	CB	SER	B	174	-8.705	86.004	-6.836	1.00	46.82	BBBB
ATOM	5152	OG	SER	B	174	-7.647	85.071	-6.710	1.00	49.86	BBBB
ATOM	5153	C	SER	B	174	-7.407	88.120	-6.660	1.00	44.63	BBBB
ATOM	5154	O	SER	B	174	-6.259	87.808	-6.358	1.00	43.51	BBBB
ATOM	5155	N	CYS	B	175	-7.994	89.224	-6.224	1.00	43.91	BBBB
ATOM	5156	CA	CYS	B	175	-7.301	90.153	-5.351	1.00	43.71	BBBB
ATOM	5157	C	CYS	B	175	-8.312	90.932	-4.527	1.00	44.59	BBBB
ATOM	5158	O	CYS	B	175	-9.360	91.326	-5.028	1.00	45.27	BBBB
ATOM	5159	CB	CYS	B	175	-6.483	91.130	-6.183	1.00	43.88	BBBB
ATOM	5160	SG	CYS	B	175	-7.479	92.314	-7.147	1.00	42.53	BBBB
ATOM	5161	N	TRP	B	176	-7.997	91.161	-3.262	1.00	44.24	BBBB
ATOM	5162	CA	TRP	B	176	-8.898	91.901	-2.408	1.00	43.98	BBBB
ATOM	5163	CB	TRP	B	176	-8.362	91.947	-0.984	1.00	45.38	BBBB
ATOM	5164	CG	TRP	B	176	-8.554	90.680	-0.283	1.00	45.93	BBBB
ATOM	5165	CD2	TRP	B	176	-9.806	90.087	0.065	1.00	46.86	BBBB
ATOM	5166	CE2	TRP	B	176	-9.524	88.851	0.683	1.00	47.65	BBBB
ATOM	5167	CE3	TRP	B	176	-11.143	90.478	-0.085	1.00	45.90	BBBB
ATOM	5168	CD1	TRP	B	176	-7.588	89.817	0.122	1.00	46.45	BBBB
ATOM	5169	NE1	TRP	B	176	-8.159	88.711	0.705	1.00	48.47	BBBB
ATOM	5170	CZ2	TRP	B	176	-10.532	87.996	1.153	1.00	47.31	BBBB

ATOM	5171	CZ3	TRP	B	176	-12.146	89.627	0.382	1.00	46.76	BBBB
ATOM	5172	CH2	TRP	B	176	-11.832	88.402	0.993	1.00	47.00	BBBB
ATOM	5173	C	TRP	B	176	-9.071	93.307	-2.918	1.00	43.89	BBBB
ATOM	5174	O	TRP	B	176	-10.184	93.746	-3.179	1.00	43.46	BBBB
ATOM	5175	N	GLY	B	177	-7.960	94.018	-3.052	1.00	43.57	BBBB
ATOM	5176	CA	GLY	B	177	-8.033	95.383	-3.527	1.00	44.42	BBBB
ATOM	5177	C	GLY	B	177	-7.299	95.634	-4.824	1.00	44.62	BBBB
ATOM	5178	O	GLY	B	177	-6.932	94.706	-5.542	1.00	44.67	BBBB
ATOM	5179	N	ALA	B	178	-7.093	96.908	-5.129	1.00	44.93	BBBB
ATOM	5180	CA	ALA	B	178	-6.389	97.293	-6.343	1.00	45.74	BBBB
ATOM	5181	CB	ALA	B	178	-6.966	98.598	-6.884	1.00	44.97	BBBB
ATOM	5182	C	ALA	B	178	-4.890	97.443	-6.070	1.00	45.24	BBBB
ATOM	5183	O	ALA	B	178	-4.450	98.395	-5.424	1.00	45.62	BBBB
ATOM	5184	N	GLY	B	179	-4.110	96.490	-6.559	1.00	44.66	BBBB
ATOM	5185	CA	GLY	B	179	-2.677	96.543	-6.350	1.00	44.17	BBBB
ATOM	5186	C	GLY	B	179	-2.083	95.172	-6.097	1.00	44.47	BBBB
ATOM	5187	O	GLY	B	179	-2.806	94.173	-6.025	1.00	44.80	BBBB
ATOM	5188	N	GLU	B	180	-0.757	95.121	-5.996	1.00	43.76	BBBB
ATOM	5189	CA	GLU	B	180	-0.050	93.882	-5.721	1.00	43.03	BBBB
ATOM	5190	CB	GLU	B	180	1.454	94.090	-5.890	1.00	41.64	BBBB
ATOM	5191	CG	GLU	B	180	1.870	94.540	-7.281	0.01	41.87	BBBB
ATOM	5192	CD	GLU	B	180	3.366	94.748	-7.405	0.01	41.68	BBBB
ATOM	5193	OE1	GLU	B	180	4.123	93.775	-7.198	0.01	41.77	BBBB
ATOM	5194	OE2	GLU	B	180	3.785	95.885	-7.711	0.01	41.79	BBBB
ATOM	5195	C	GLU	B	180	-0.371	93.575	-4.266	1.00	43.73	BBBB
ATOM	5196	O	GLU	B	180	-0.809	92.475	-3.921	1.00	43.75	BBBB
ATOM	5197	N	GLU	B	181	-0.165	94.596	-3.435	1.00	44.85	BBBB
ATOM	5198	CA	GLU	B	181	-0.404	94.571	-1.988	1.00	45.20	BBBB
ATOM	5199	CB	GLU	B	181	-0.274	95.995	-1.420	1.00	45.56	BBBB
ATOM	5200	CG	GLU	B	181	1.156	96.519	-1.313	0.01	45.13	BBBB
ATOM	5201	CD	GLU	B	181	1.860	96.625	-2.653	0.01	45.06	BBBB
ATOM	5202	OE1	GLU	B	181	2.137	95.576	-3.271	0.01	44.94	BBBB
ATOM	5203	OE2	GLU	B	181	2.137	97.762	-3.090	0.01	44.94	BBBB
ATOM	5204	C	GLU	B	181	-1.742	93.988	-1.527	1.00	44.16	BBBB
ATOM	5205	O	GLU	B	181	-1.911	93.686	-0.351	1.00	42.92	BBBB
ATOM	5206	N	ASN	B	182	-2.690	93.833	-2.444	1.00	44.60	BBBB
ATOM	5207	CA	ASN	B	182	-3.999	93.303	-2.081	1.00	45.21	BBBB
ATOM	5208	CB	ASN	B	182	-5.065	94.367	-2.306	1.00	46.01	BBBB
ATOM	5209	CG	ASN	B	182	-4.739	95.654	-1.594	1.00	46.81	BBBB
ATOM	5210	OD1	ASN	B	182	-4.865	95.752	-0.375	1.00	46.45	BBBB
ATOM	5211	ND2	ASN	B	182	-4.292	96.647	-2.351	1.00	46.73	BBBB
ATOM	5212	C	ASN	B	182	-4.354	92.043	-2.845	1.00	44.71	BBBB
ATOM	5213	O	ASN	B	182	-5.525	91.693	-2.988	1.00	44.30	BBBB
ATOM	5214	N	CYS	B	183	-3.331	91.372	-3.351	1.00	44.70	BBBB
ATOM	5215	CA	CYS	B	183	-3.533	90.125	-4.063	1.00	45.07	BBBB
ATOM	5216	C	CYS	B	183	-4.005	89.117	-3.016	1.00	44.84	BBBB
ATOM	5217	O	CYS	B	183	-3.587	89.193	-1.855	1.00	45.06	BBBB
ATOM	5218	CB	CYS	B	183	-2.212	89.643	-4.655	1.00	45.81	BBBB
ATOM	5219	SG	CYS	B	183	-1.828	90.227	-6.326	1.00	49.60	BBBB
ATOM	5220	N	GLN	B	184	-4.869	88.181	-3.402	1.00	42.65	BBBB
ATOM	5221	CA	GLN	B	184	-5.319	87.192	-2.439	1.00	40.22	BBBB
ATOM	5222	CB	GLN	B	184	-6.396	86.275	-3.015	1.00	38.23	BBBB
ATOM	5223	CG	GLN	B	184	-6.903	85.270	-1.993	1.00	37.67	BBBB
ATOM	5224	CD	GLN	B	184	-8.145	84.519	-2.440	1.00	38.56	BBBB
ATOM	5225	OE1	GLN	B	184	-9.028	85.078	-3.082	1.00	38.18	BBBB
ATOM	5226	NE2	GLN	B	184	-8.224	83.247	-2.079	1.00	39.18	BBBB
ATOM	5227	C	GLN	B	184	-4.112	86.364	-2.107	1.00	40.50	BBBB
ATOM	5228	O	GLN	B	184	-3.279	86.117	-2.965	1.00	41.28	BBBB
ATOM	5229	N	LYS	B	185	-3.997	85.959	-0.854	1.00	41.38	BBBB
ATOM	5230	CA	LYS	B	185	-2.883	85.122	-0.436	1.00	41.21	BBBB
ATOM	5231	CB	LYS	B	185	-2.178	85.718	0.785	1.00	41.99	BBBB
ATOM	5232	CG	LYS	B	185	-0.841	86.354	0.464	1.00	43.17	BBBB
ATOM	5233	CD	LYS	B	185	-0.089	86.710	1.736	1.00	45.53	BBBB
ATOM	5234	CE	LYS	B	185	1.410	86.895	1.470	1.00	46.38	BBBB
ATOM	5235	NZ	LYS	B	185	2.216	87.040	2.737	1.00	46.67	BBBB
ATOM	5236	C	LYS	B	185	-3.440	83.742	-0.110	1.00	40.52	BBBB
ATOM	5237	O	LYS	B	185	-3.879	83.488	1.017	1.00	41.41	BBBB
ATOM	5238	N	LEU	B	186	-3.435	82.868	-1.116	1.00	37.71	BBBB
ATOM	5239	CA	LEU	B	186	-3.937	81.508	-0.983	1.00	35.51	BBBB
ATOM	5240	CB	LEU	B	186	-3.978	80.845	-2.350	1.00	34.54	BBBB
ATOM	5241	CG	LEU	B	186	-4.819	81.477	-3.442	1.00	33.93	BBBB
ATOM	5242	CD1	LEU	B	186	-4.318	80.969	-4.765	1.00	33.45	BBBB
ATOM	5243	CD2	LEU	B	186	-6.290	81.151	-3.245	1.00	32.81	BBBB
ATOM	5244	C	LEU	B	186	-3.053	80.660	-0.082	1.00	34.61	BBBB
ATOM	5245	O	LEU	B	186	-1.844	80.616	-0.277	1.00	35.18	BBBB

ATOM	5246	N	THR	B	187	-3.663	79.990	0.894	1.00	32.99	BBBB
ATOM	5247	CA	THR	B	187	-2.959	79.096	1.826	1.00	31.46	BBBB
ATOM	5248	CB	THR	B	187	-2.425	79.847	3.054	1.00	29.79	BBBB
ATOM	5249	OG1	THR	B	187	-3.456	80.680	3.584	1.00	30.68	BBBB
ATOM	5250	CG2	THR	B	187	-1.244	80.693	2.694	1.00	29.76	BBBB
ATOM	5251	C	THR	B	187	-3.913	77.998	2.320	1.00	30.79	BBBB
ATOM	5252	O	THR	B	187	-3.515	76.861	2.567	1.00	28.76	BBBB
ATOM	5253	N	CYS	B	191	-2.881	73.298	0.361	1.00	65.46	BBBB
ATOM	5254	CA	CYS	B	191	-1.544	73.630	-0.115	1.00	64.95	BBBB
ATOM	5255	C	CYS	B	191	-0.969	72.654	-1.132	1.00	65.47	BBBB
ATOM	5256	O	CYS	B	191	-0.568	73.049	-2.228	1.00	65.47	BBBB
ATOM	5257	CB	CYS	B	191	-0.600	73.730	1.066	1.00	63.60	BBBB
ATOM	5258	SG	CYS	B	191	-0.638	75.365	1.838	1.00	62.92	BBBB
ATOM	5259	N	ALA	B	192	-0.925	71.381	-0.755	1.00	65.77	BBBB
ATOM	5260	CA	ALA	B	192	-0.397	70.334	-1.617	1.00	65.72	BBBB
ATOM	5261	CB	ALA	B	192	1.095	70.532	-1.797	1.00	65.60	BBBB
ATOM	5262	C	ALA	B	192	-0.672	68.959	-1.012	1.00	65.62	BBBB
ATOM	5263	O	ALA	B	192	-1.383	68.835	-0.010	1.00	65.70	BBBB
ATOM	5264	N	GLN	B	193	-0.122	67.923	-1.634	1.00	65.25	BBBB
ATOM	5265	CA	GLN	B	193	-0.290	66.571	-1.123	1.00	64.62	BBBB
ATOM	5266	CB	GLN	B	193	-0.124	65.546	-2.251	1.00	63.88	BBBB
ATOM	5267	CG	GLN	B	193	-1.130	65.701	-3.381	0.01	63.89	BBBB
ATOM	5268	CD	GLN	B	193	-0.962	64.650	-4.462	0.01	63.70	BBBB
ATOM	5269	OE1	GLN	B	193	-1.066	63.452	-4.200	0.01	63.70	BBBB
ATOM	5270	NE2	GLN	B	193	-0.703	65.096	-5.686	0.01	63.70	BBBB
ATOM	5271	C	GLN	B	193	0.807	66.396	-0.077	1.00	64.22	BBBB
ATOM	5272	O	GLN	B	193	1.988	66.595	-0.381	1.00	64.54	BBBB
ATOM	5273	N	GLN	B	194	0.402	66.052	1.147	1.00	62.80	BBBB
ATOM	5274	CA	GLN	B	194	1.308	65.847	2.285	1.00	61.84	BBBB
ATOM	5275	CB	GLN	B	194	2.740	65.546	1.803	1.00	61.89	BBBB
ATOM	5276	CG	GLN	B	194	3.754	65.290	2.907	1.00	62.03	BBBB
ATOM	5277	CD	GLN	B	194	3.422	64.065	3.738	0.01	61.89	BBBB
ATOM	5278	OE1	GLN	B	194	2.369	63.996	4.372	0.01	61.84	BBBB
ATOM	5279	NE2	GLN	B	194	4.324	63.091	3.739	0.01	61.85	BBBB
ATOM	5280	C	GLN	B	194	1.301	67.083	3.190	1.00	61.03	BBBB
ATOM	5281	O	GLN	B	194	2.353	67.570	3.617	1.00	60.86	BBBB
ATOM	5282	N	CYS	B	195	0.099	67.581	3.475	1.00	59.85	BBBB
ATOM	5283	CA	CYS	B	195	-0.087	68.757	4.320	1.00	57.55	BBBB
ATOM	5284	C	CYS	B	195	-1.185	68.563	5.340	1.00	56.39	BBBB
ATOM	5285	O	CYS	B	195	-2.349	68.429	4.977	1.00	56.68	BBBB
ATOM	5286	CB	CYS	B	195	-0.413	69.974	3.467	1.00	56.22	BBBB
ATOM	5287	SG	CYS	B	195	1.082	70.844	2.924	1.00	57.51	BBBB
ATOM	5288	N	SER	B	196	-0.807	68.568	6.616	1.00	55.23	BBBB
ATOM	5289	CA	SER	B	196	-1.750	68.374	7.717	1.00	53.82	BBBB
ATOM	5290	CB	SER	B	196	-1.003	68.358	9.044	1.00	53.11	BBBB
ATOM	5291	OG	SER	B	196	-0.387	69.608	9.269	1.00	53.19	BBBB
ATOM	5292	C	SER	B	196	-2.834	69.438	7.779	1.00	52.88	BBBB
ATOM	5293	O	SER	B	196	-3.891	69.214	8.358	1.00	52.71	BBBB
ATOM	5294	N	GLY	B	197	-2.561	70.593	7.184	1.00	52.61	BBBB
ATOM	5295	CA	GLY	B	197	-3.517	71.685	7.187	1.00	52.46	BBBB
ATOM	5296	C	GLY	B	197	-3.085	72.775	6.229	1.00	52.37	BBBB
ATOM	5297	O	GLY	B	197	-3.101	72.561	5.021	1.00	53.06	BBBB
ATOM	5298	N	ARG	B	198	-2.694	73.934	6.754	1.00	51.79	BBBB
ATOM	5299	CA	ARG	B	198	-2.257	75.044	5.910	1.00	51.54	BBBB
ATOM	5300	CB	ARG	B	198	-2.567	76.377	6.586	1.00	49.54	BBBB
ATOM	5301	CG	ARG	B	198	-3.996	76.480	7.084	1.00	47.91	BBBB
ATOM	5302	CD	ARG	B	198	-4.415	77.931	7.304	1.00	47.43	BBBB
ATOM	5303	NE	ARG	B	198	-5.011	78.529	6.113	1.00	45.55	BBBB
ATOM	5304	CZ	ARG	B	198	-6.258	78.311	5.704	1.00	44.95	BBBB
ATOM	5305	NH1	ARG	B	198	-7.068	77.515	6.386	1.00	44.32	BBBB
ATOM	5306	NH2	ARG	B	198	-6.685	78.871	4.585	1.00	44.67	BBBB
ATOM	5307	C	ARG	B	198	-0.769	74.945	5.646	1.00	52.64	BBBB
ATOM	5308	O	ARG	B	198	-0.167	73.918	5.927	1.00	52.98	BBBB
ATOM	5309	N	CYS	B	199	-0.188	76.006	5.085	1.00	54.70	BBBB
ATOM	5310	CA	CYS	B	199	1.256	76.063	4.791	1.00	56.05	BBBB
ATOM	5311	C	CYS	B	199	1.704	77.448	4.327	1.00	55.73	BBBB
ATOM	5312	O	CYS	B	199	0.935	78.415	4.340	1.00	55.24	BBBB
ATOM	5313	CB	CYS	B	199	1.659	75.088	3.694	1.00	57.50	BBBB
ATOM	5314	SG	CYS	B	199	1.329	75.796	2.051	1.00	60.56	BBBB
ATOM	5315	N	ARG	B	200	2.962	77.513	3.900	1.00	55.17	BBBB
ATOM	5316	CA	ARG	B	200	3.560	78.750	3.425	1.00	54.55	BBBB
ATOM	5317	CB	ARG	B	200	4.807	79.079	4.258	1.00	53.79	BBBB
ATOM	5318	CG	ARG	B	200	5.277	80.533	4.195	0.01	54.02	BBBB
ATOM	5319	CD	ARG	B	200	5.740	80.958	2.805	0.01	54.01	BBBB
ATOM	5320	NE	ARG	B	200	4.628	81.151	1.879	0.01	53.99	BBBB

ATOM	5321	CZ	ARG	B	200	4.768	81.528	0.612	0.01	53.95	BBBB
ATOM	5322	NH1	ARG	B	200	5.977	81.755	0.115	0.01	53.87	BBBB
ATOM	5323	NH2	ARG	B	200	3.700	81.679	-0.160	0.01	53.86	BBBB
ATOM	5324	C	ARG	B	200	3.934	78.536	1.961	1.00	54.11	BBBB
ATOM	5325	O	ARG	B	200	3.418	77.626	1.313	1.00	53.02	BBBB
ATOM	5326	N	GLY	B	201	7.580	75.841	0.614	1.00	70.09	BBBB
ATOM	5327	CA	GLY	B	201	6.771	76.316	-0.494	1.00	70.25	BBBB
ATOM	5328	C	GLY	B	201	5.430	75.617	-0.493	1.00	70.63	BBBB
ATOM	5329	O	GLY	B	201	5.297	74.573	0.136	1.00	71.18	BBBB
ATOM	5330	N	LYS	B	202	4.440	76.185	-1.183	1.00	70.91	BBBB
ATOM	5331	CA	LYS	B	202	3.101	75.590	-1.246	1.00	70.90	BBBB
ATOM	5332	CB	LYS	B	202	2.102	76.549	-1.918	1.00	70.48	BBBB
ATOM	5333	CG	LYS	B	202	0.631	76.083	-1.852	1.00	69.65	BBBB
ATOM	5334	CD	LYS	B	202	-0.309	76.988	-2.657	1.00	67.01	BBBB
ATOM	5335	CE	LYS	B	202	-1.794	76.645	-2.437	1.00	66.18	BBBB
ATOM	5336	NZ	LYS	B	202	-2.236	75.290	-2.878	1.00	62.00	BBBB
ATOM	5337	C	LYS	B	202	3.164	74.291	-2.036	1.00	71.22	BBBB
ATOM	5338	O	LYS	B	202	2.738	74.238	-3.195	1.00	70.79	BBBB
ATOM	5339	N	SER	B	203	3.692	73.245	-1.401	1.00	71.83	BBBB
ATOM	5340	CA	SER	B	203	3.827	71.951	-2.054	1.00	71.13	BBBB
ATOM	5341	CB	SER	B	203	4.534	72.145	-3.404	1.00	71.87	BBBB
ATOM	5342	OG	SER	B	203	5.593	73.088	-3.303	1.00	70.98	BBBB
ATOM	5343	C	SER	B	203	4.512	70.814	-1.269	1.00	70.32	BBBB
ATOM	5344	O	SER	B	203	3.849	69.860	-0.861	1.00	71.04	BBBB
ATOM	5345	N	PRO	B	204	5.834	70.920	-1.019	1.00	68.74	BBBB
ATOM	5346	CD	PRO	B	204	6.542	72.213	-0.987	1.00	67.54	BBBB
ATOM	5347	CA	PRO	B	204	6.626	69.909	-0.303	1.00	68.12	BBBB
ATOM	5348	CB	PRO	B	204	7.813	70.714	0.217	1.00	68.09	BBBB
ATOM	5349	CG	PRO	B	204	7.955	71.795	-0.776	1.00	67.64	BBBB
ATOM	5350	C	PRO	B	204	5.935	69.134	0.825	1.00	68.25	BBBB
ATOM	5351	O	PRO	B	204	4.967	68.398	0.612	1.00	67.59	BBBB
ATOM	5352	N	SER	B	205	6.490	69.287	2.023	1.00	67.96	BBBB
ATOM	5353	CA	SER	B	205	5.990	68.663	3.247	1.00	67.54	BBBB
ATOM	5354	CB	SER	B	205	6.812	67.409	3.577	1.00	67.95	BBBB
ATOM	5355	OG	SER	B	205	6.329	66.746	4.733	1.00	68.09	BBBB
ATOM	5356	C	SER	B	205	6.214	69.751	4.300	1.00	66.71	BBBB
ATOM	5357	O	SER	B	205	6.004	69.559	5.503	1.00	66.21	BBBB
ATOM	5358	N	ASP	B	206	6.652	70.903	3.794	1.00	65.08	BBBB
ATOM	5359	CA	ASP	B	206	6.940	72.088	4.587	1.00	63.21	BBBB
ATOM	5360	CB	ASP	B	206	7.838	73.035	3.786	1.00	63.37	BBBB
ATOM	5361	CG	ASP	B	206	9.083	72.352	3.267	1.00	62.97	BBBB
ATOM	5362	OD1	ASP	B	206	8.961	71.283	2.638	1.00	62.06	BBBB
ATOM	5363	OD2	ASP	B	206	10.185	72.886	3.483	1.00	63.70	BBBB
ATOM	5364	C	ASP	B	206	5.636	72.795	4.940	1.00	61.54	BBBB
ATOM	5365	O	ASP	B	206	5.549	74.029	4.924	1.00	62.21	BBBB
ATOM	5366	N	CYS	B	207	4.615	72.003	5.237	1.00	57.84	BBBB
ATOM	5367	CA	CYS	B	207	3.329	72.557	5.612	1.00	54.41	BBBB
ATOM	5368	C	CYS	B	207	3.482	73.169	7.005	1.00	52.05	BBBB
ATOM	5369	O	CYS	B	207	4.519	73.029	7.643	1.00	51.67	BBBB
ATOM	5370	CB	CYS	B	207	2.292	71.445	5.637	1.00	54.27	BBBB
ATOM	5371	SG	CYS	B	207	2.488	70.262	4.271	1.00	52.12	BBBB
ATOM	5372	N	CYS	B	208	2.455	73.861	7.471	1.00	49.84	BBBB
ATOM	5373	CA	CYS	B	208	2.507	74.464	8.789	1.00	47.55	BBBB
ATOM	5374	C	CYS	B	208	2.248	73.361	9.787	1.00	47.19	BBBB
ATOM	5375	O	CYS	B	208	2.096	72.202	9.419	1.00	47.29	BBBB
ATOM	5376	CB	CYS	B	208	1.408	75.517	8.970	1.00	45.83	BBBB
ATOM	5377	SG	CYS	B	208	1.416	76.961	7.869	1.00	43.18	BBBB
ATOM	5378	N	HIS	B	209	2.186	73.747	11.052	1.00	46.68	BBBB
ATOM	5379	CA	HIS	B	209	1.899	72.837	12.149	1.00	47.12	BBBB
ATOM	5380	CB	HIS	B	209	2.521	73.402	13.426	1.00	48.62	BBBB
ATOM	5381	CG	HIS	B	209	2.318	72.548	14.633	1.00	49.35	BBBB
ATOM	5382	CD2	HIS	B	209	3.202	71.868	15.398	1.00	50.05	BBBB
ATOM	5383	ND1	HIS	B	209	1.078	72.329	15.192	1.00	50.18	BBBB
ATOM	5384	CE1	HIS	B	209	1.210	71.552	16.252	1.00	51.83	BBBB
ATOM	5385	NE2	HIS	B	209	2.489	71.259	16.400	1.00	50.99	BBBB
ATOM	5386	C	HIS	B	209	0.369	72.799	12.260	1.00	46.91	BBBB
ATOM	5387	O	HIS	B	209	-0.249	73.814	12.566	1.00	47.36	BBBB
ATOM	5388	N	ASN	B	210	-0.237	71.642	12.007	1.00	45.94	BBBB
ATOM	5389	CA	ASN	B	210	-1.693	71.510	12.049	1.00	44.98	BBBB
ATOM	5390	CB	ASN	B	210	-2.094	70.077	12.397	1.00	47.25	BBBB
ATOM	5391	CG	ASN	B	210	-1.793	69.724	13.838	1.00	50.56	BBBB
ATOM	5392	OD1	ASN	B	210	-2.400	68.813	14.408	1.00	51.98	BBBB
ATOM	5393	ND2	ASN	B	210	-0.847	70.440	14.435	1.00	51.69	BBBB
ATOM	5394	C	ASN	B	210	-2.391	72.466	13.016	1.00	43.16	BBBB
ATOM	5395	O	ASN	B	210	-3.535	72.858	12.798	1.00	41.96	BBBB

ATOM	5396	N	GLN	B	211	-1.701	72.840	14.085	1.00	41.78	BBBB
ATOM	5397	CA	GLN	B	211	-2.272	73.743	15.072	1.00	40.69	BBBB
ATOM	5398	CB	GLN	B	211	-1.416	73.736	16.335	1.00	40.73	BBBB
ATOM	5399	CG	GLN	B	211	-1.682	72.542	17.233	1.00	40.73	BBBB
ATOM	5400	CD	GLN	B	211	-3.133	72.427	17.616	1.00	39.61	BBBB
ATOM	5401	OE1	GLN	B	211	-3.739	73.380	18.088	1.00	38.42	BBBB
ATOM	5402	NE2	GLN	B	211	-3.701	71.253	17.414	1.00	41.06	BBBB
ATOM	5403	C	GLN	B	211	-2.455	75.174	14.584	1.00	39.35	BBBB
ATOM	5404	O	GLN	B	211	-3.321	75.894	15.068	1.00	38.65	BBBB
ATOM	5405	N	CYS	B	212	-1.646	75.588	13.621	1.00	38.41	BBBB
ATOM	5406	CA	CYS	B	212	-1.744	76.935	13.092	1.00	37.20	BBBB
ATOM	5407	C	CYS	B	212	-3.106	77.274	12.487	1.00	37.37	BBBB
ATOM	5408	O	CYS	B	212	-3.953	76.407	12.252	1.00	38.01	BBBB
ATOM	5409	CB	CYS	B	212	-0.677	77.152	12.035	1.00	36.02	BBBB
ATOM	5410	SG	CYS	B	212	1.049	77.047	12.608	1.00	39.12	BBBB
ATOM	5411	N	ALA	B	213	-3.304	78.565	12.254	1.00	36.82	BBBB
ATOM	5412	CA	ALA	B	213	-4.510	79.093	11.630	1.00	35.13	BBBB
ATOM	5413	CB	ALA	B	213	-5.452	79.661	12.672	1.00	34.08	BBBB
ATOM	5414	C	ALA	B	213	-3.967	80.199	10.734	1.00	34.73	BBBB
ATOM	5415	O	ALA	B	213	-2.827	80.629	10.911	1.00	34.39	BBBB
ATOM	5416	N	ALA	B	214	-4.760	80.657	9.778	1.00	34.49	BBBB
ATOM	5417	CA	ALA	B	214	-4.302	81.698	8.868	1.00	36.05	BBBB
ATOM	5418	CB	ALA	B	214	-3.815	82.905	9.644	1.00	35.28	BBBB
ATOM	5419	C	ALA	B	214	-3.168	81.132	8.024	1.00	36.80	BBBB
ATOM	5420	O	ALA	B	214	-3.401	80.579	6.952	1.00	38.00	BBBB
ATOM	5421	N	GLY	B	215	-1.942	81.270	8.514	1.00	36.96	BBBB
ATOM	5422	CA	GLY	B	215	-0.787	80.753	7.801	1.00	37.29	BBBB
ATOM	5423	C	GLY	B	215	0.340	80.527	8.785	1.00	37.35	BBBB
ATOM	5424	O	GLY	B	215	0.083	80.309	9.962	1.00	37.52	BBBB
ATOM	5425	N	CYS	B	216	1.582	80.577	8.316	1.00	38.10	BBBB
ATOM	5426	CA	CYS	B	216	2.728	80.398	9.194	1.00	39.48	BBBB
ATOM	5427	C	CYS	B	216	4.003	80.933	8.575	1.00	41.22	BBBB
ATOM	5428	O	CYS	B	216	4.029	81.258	7.400	1.00	41.35	BBBB
ATOM	5429	CB	CYS	B	216	2.913	78.929	9.554	1.00	39.17	BBBB
ATOM	5430	SG	CYS	B	216	3.234	77.820	8.160	1.00	36.69	BBBB
ATOM	5431	N	THR	B	217	5.055	81.022	9.383	1.00	43.62	BBBB
ATOM	5432	CA	THR	B	217	6.350	81.530	8.944	1.00	45.83	BBBB
ATOM	5433	CB	THR	B	217	6.631	82.903	9.550	1.00	47.58	BBBB
ATOM	5434	OG1	THR	B	217	6.605	82.803	10.981	1.00	48.81	BBBB
ATOM	5435	CG2	THR	B	217	5.579	83.902	9.110	1.00	49.31	BBBB
ATOM	5436	C	THR	B	217	7.430	80.582	9.423	1.00	47.36	BBBB
ATOM	5437	O	THR	B	217	8.478	81.007	9.901	1.00	47.29	BBBB
ATOM	5438	N	GLY	B	218	7.155	79.290	9.297	1.00	49.73	BBBB
ATOM	5439	CA	GLY	B	218	8.092	78.265	9.721	1.00	51.43	BBBB
ATOM	5440	C	GLY	B	218	7.335	76.966	9.925	1.00	52.62	BBBB
ATOM	5441	O	GLY	B	218	6.107	76.993	10.026	1.00	52.66	BBBB
ATOM	5442	N	PRO	B	219	8.030	75.814	9.997	1.00	52.85	BBBB
ATOM	5443	CD	PRO	B	219	9.478	75.687	9.750	1.00	52.64	BBBB
ATOM	5444	CA	PRO	B	219	7.431	74.488	10.184	1.00	52.38	BBBB
ATOM	5445	CB	PRO	B	219	8.305	73.621	9.313	1.00	52.87	BBBB
ATOM	5446	CG	PRO	B	219	9.674	74.167	9.666	1.00	53.20	BBBB
ATOM	5447	C	PRO	B	219	7.525	74.066	11.633	1.00	52.80	BBBB
ATOM	5448	O	PRO	B	219	8.274	73.149	11.960	1.00	52.35	BBBB
ATOM	5449	N	ARG	B	220	6.768	74.730	12.498	1.00	53.38	BBBB
ATOM	5450	CA	ARG	B	220	6.823	74.426	13.916	1.00	54.34	BBBB
ATOM	5451	CB	ARG	B	220	8.101	75.022	14.521	1.00	53.90	BBBB
ATOM	5452	CG	ARG	B	220	8.434	74.528	15.921	0.01	54.28	BBBB
ATOM	5453	CD	ARG	B	220	8.748	73.039	15.922	0.01	54.31	BBBB
ATOM	5454	NE	ARG	B	220	9.190	72.568	17.232	0.01	54.45	BBBB
ATOM	5455	CZ	ARG	B	220	8.440	72.588	18.329	0.01	54.50	BBBB
ATOM	5456	NH1	ARG	B	220	7.199	73.055	18.282	0.01	54.60	BBBB
ATOM	5457	NH2	ARG	B	220	8.931	72.141	19.477	0.01	54.57	BBBB
ATOM	5458	C	ARG	B	220	5.617	74.964	14.667	1.00	55.58	BBBB
ATOM	5459	O	ARG	B	220	4.906	75.849	14.183	1.00	56.25	BBBB
ATOM	5460	N	GLU	B	221	5.416	74.423	15.865	1.00	55.92	BBBB
ATOM	5461	CA	GLU	B	221	4.323	74.803	16.741	1.00	55.33	BBBB
ATOM	5462	CB	GLU	B	221	4.107	73.707	17.783	1.00	56.73	BBBB
ATOM	5463	CG	GLU	B	221	2.679	73.581	18.281	1.00	58.50	BBBB
ATOM	5464	CD	GLU	B	221	2.493	72.411	19.226	1.00	58.36	BBBB
ATOM	5465	OE1	GLU	B	221	1.343	71.966	19.409	1.00	57.64	BBBB
ATOM	5466	OE2	GLU	B	221	3.501	71.942	19.792	1.00	59.61	BBBB
ATOM	5467	C	GLU	B	221	4.685	76.105	17.439	1.00	54.99	BBBB
ATOM	5468	O	GLU	B	221	4.425	76.272	18.621	1.00	54.56	BBBB
ATOM	5469	N	SER	B	222	5.292	77.025	16.704	1.00	55.06	BBBB
ATOM	5470	CA	SER	B	222	5.692	78.306	17.270	1.00	55.38	BBBB

ATOM	5471	CB	SER	B	222	6.974	78.145	18.074	1.00	55.72	BBBB
ATOM	5472	OG	SER	B	222	8.052	77.855	17.205	1.00	56.34	BBBB
ATOM	5473	C	SER	B	222	5.942	79.312	16.158	1.00	55.57	BBBB
ATOM	5474	O	SER	B	222	6.304	80.462	16.410	1.00	55.95	BBBB
ATOM	5475	N	ASP	B	223	5.766	78.873	14.922	1.00	54.59	BBBB
ATOM	5476	CA	ASP	B	223	5.978	79.761	13.795	1.00	53.73	BBBB
ATOM	5477	CB	ASP	B	223	6.848	79.060	12.748	1.00	55.19	BBBB
ATOM	5478	CG	ASP	B	223	8.121	78.484	13.349	1.00	56.12	BBBB
ATOM	5479	OD1	ASP	B	223	8.648	79.102	14.302	1.00	56.34	BBBB
ATOM	5480	OD2	ASP	B	223	8.599	77.431	12.870	1.00	54.87	BBBB
ATOM	5481	C	ASP	B	223	4.620	80.151	13.216	1.00	52.23	BBBB
ATOM	5482	O	ASP	B	223	4.533	80.861	12.208	1.00	52.26	BBBB
ATOM	5483	N	CYS	B	224	3.564	79.685	13.884	1.00	49.03	BBBB
ATOM	5484	CA	CYS	B	224	2.192	79.956	13.477	1.00	45.28	BBBB
ATOM	5485	C	CYS	B	224	1.938	81.445	13.320	1.00	44.61	BBBB
ATOM	5486	O	CYS	B	224	2.802	82.266	13.631	1.00	44.73	BBBB
ATOM	5487	CB	CYS	B	224	1.209	79.407	14.516	1.00	43.11	BBBB
ATOM	5488	SG	CYS	B	224	1.008	77.600	14.557	1.00	37.83	BBBB
ATOM	5489	N	LEU	B	225	0.751	81.787	12.818	1.00	43.11	BBBB
ATOM	5490	CA	LEU	B	225	0.363	83.186	12.674	1.00	41.48	BBBB
ATOM	5491	CB	LEU	B	225	-0.198	83.473	11.270	1.00	40.40	BBBB
ATOM	5492	CG	LEU	B	225	0.783	83.512	10.091	1.00	38.74	BBBB
ATOM	5493	CD1	LEU	B	225	0.131	84.235	8.929	1.00	37.59	BBBB
ATOM	5494	CD2	LEU	B	225	2.062	84.225	10.479	1.00	37.86	BBBB
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ATOM	5497	N	VAL	B	226	-1.606	82.520	13.911	1.00	38.59	BBBB
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ATOM	5506	C	CYS	B	227	-4.816	79.129	16.806	1.00	33.78	BBBB
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ATOM	5508	CB	CYS	B	227	-3.120	79.416	18.593	1.00	31.74	BBBB
ATOM	5509	SG	CYS	B	227	-1.355	79.500	19.033	1.00	29.74	BBBB
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ATOM	5512	CB	ARG	B	228	-6.253	76.185	15.214	1.00	39.57	BBBB
ATOM	5513	CG	ARG	B	228	-7.575	75.486	14.923	1.00	44.55	BBBB
ATOM	5514	CD	ARG	B	228	-7.448	74.552	13.732	1.00	48.36	BBBB
ATOM	5515	NE	ARG	B	228	-6.252	73.713	13.816	1.00	52.85	BBBB
ATOM	5516	CZ	ARG	B	228	-6.023	72.811	14.768	1.00	54.89	BBBB
ATOM	5517	NH1	ARG	B	228	-6.907	72.616	15.741	1.00	54.94	BBBB
ATOM	5518	NH2	ARG	B	228	-4.908	72.089	14.738	1.00	56.76	BBBB
ATOM	5519	C	ARG	B	228	-7.132	76.901	17.424	1.00	37.68	BBBB
ATOM	5520	O	ARG	B	228	-8.363	76.979	17.456	1.00	37.86	BBBB
ATOM	5521	N	LYS	B	229	-6.407	76.428	18.430	1.00	39.02	BBBB
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ATOM	5523	CB	LYS	B	229	-6.860	74.456	19.815	1.00	38.98	BBBB
ATOM	5524	CG	LYS	B	229	-7.498	73.652	18.687	1.00	38.07	BBBB
ATOM	5525	CD	LYS	B	229	-7.761	72.219	19.101	0.01	37.74	BBBB
ATOM	5526	CE	LYS	B	229	-8.498	71.459	18.010	0.01	37.38	BBBB
ATOM	5527	NZ	LYS	B	229	-8.800	70.057	18.409	0.01	37.14	BBBB
ATOM	5528	C	LYS	B	229	-6.502	76.707	20.875	1.00	38.83	BBBB
ATOM	5529	O	LYS	B	229	-7.054	77.732	21.266	1.00	38.57	BBBB
ATOM	5530	N	PHE	B	230	-5.428	76.198	21.464	1.00	38.87	BBBB
ATOM	5531	CA	PHE	B	230	-4.858	76.826	22.646	1.00	39.73	BBBB
ATOM	5532	CB	PHE	B	230	-4.667	75.792	23.759	1.00	38.79	BBBB
ATOM	5533	CG	PHE	B	230	-5.831	75.671	24.686	1.00	37.92	BBBB
ATOM	5534	CD1	PHE	B	230	-6.186	74.445	25.214	1.00	38.37	BBBB
ATOM	5535	CD2	PHE	B	230	-6.569	76.780	25.043	1.00	38.65	BBBB
ATOM	5536	CE1	PHE	B	230	-7.263	74.325	26.086	1.00	39.11	BBBB
ATOM	5537	CE2	PHE	B	230	-7.648	76.665	25.915	1.00	39.05	BBBB
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ATOM	5543	CB	ARG	B	231	-2.160	80.714	22.604	1.00	45.52	BBBB
ATOM	5544	CG	ARG	B	231	-0.946	81.345	21.924	1.00	47.27	BBBB
ATOM	5545	CD	ARG	B	231	-0.370	82.526	22.682	1.00	49.35	BBBB

ATOM	5546	NE	ARG	B	231	-1.022	83.781	22.332	1.00	51.71	BBBB
ATOM	5547	CZ	ARG	B	231	-2.288	84.075	22.609	1.00	52.96	BBBB
ATOM	5548	NH1	ARG	B	231	-3.049	83.200	23.248	1.00	53.42	BBBB
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ATOM	5553	CA	ASP	B	232	0.864	78.492	25.389	1.00	47.41	BBBB
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ATOM	5555	CG	ASP	B	232	2.298	76.811	26.598	1.00	47.74	BBBB
ATOM	5556	OD1	ASP	B	232	3.333	77.380	26.997	1.00	48.97	BBBB
ATOM	5557	OD2	ASP	B	232	1.716	75.914	27.237	1.00	47.57	BBBB
ATOM	5558	C	ASP	B	232	1.734	79.744	25.411	1.00	48.77	BBBB
ATOM	5559	O	ASP	B	232	1.213	80.841	25.226	1.00	50.27	BBBB
ATOM	5560	N	GLU	B	233	3.037	79.626	25.643	1.00	48.96	BBBB
ATOM	5561	CA	GLU	B	233	3.829	80.846	25.612	1.00	48.34	BBBB
ATOM	5562	CB	GLU	B	233	5.237	80.633	26.188	1.00	50.32	BBBB
ATOM	5563	CG	GLU	B	233	6.016	79.428	25.706	1.00	54.27	BBBB
ATOM	5564	CD	GLU	B	233	7.266	79.191	26.558	1.00	57.58	BBBB
ATOM	5565	OE1	GLU	B	233	8.114	80.115	26.654	1.00	58.04	BBBB
ATOM	5566	OE2	GLU	B	233	7.398	78.083	27.137	1.00	58.47	BBBB
ATOM	5567	C	GLU	B	233	3.860	81.290	24.154	1.00	46.38	BBBB
ATOM	5568	O	GLU	B	233	3.052	82.122	23.746	1.00	44.38	BBBB
ATOM	5569	N	ALA	B	234	4.755	80.722	23.357	1.00	45.06	BBBB
ATOM	5570	CA	ALA	B	234	4.814	81.078	21.941	1.00	43.44	BBBB
ATOM	5571	CB	ALA	B	234	6.201	81.556	21.562	1.00	42.93	BBBB
ATOM	5572	C	ALA	B	234	4.453	79.865	21.108	1.00	41.93	BBBB
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ATOM	5575	CA	THR	B	235	3.165	77.833	20.913	1.00	37.24	BBBB
ATOM	5576	CB	THR	B	235	3.800	76.572	21.549	1.00	38.74	BBBB
ATOM	5577	OG1	THR	B	235	3.098	75.403	21.112	1.00	38.71	BBBB
ATOM	5578	CG2	THR	B	235	3.750	76.652	23.059	1.00	39.45	BBBB
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ATOM	5582	CA	CYS	B	236	-0.110	76.605	19.530	1.00	30.50	BBBB
ATOM	5583	C	CYS	B	236	-0.328	75.161	19.961	1.00	30.62	BBBB
ATOM	5584	O	CYS	B	236	0.238	74.248	19.372	1.00	30.17	BBBB
ATOM	5585	CB	CYS	B	236	-0.452	76.793	18.066	1.00	29.90	BBBB
ATOM	5586	SG	CYS	B	236	-0.397	78.529	17.537	1.00	30.86	BBBB
ATOM	5587	N	LYS	B	237	-1.134	74.956	21.000	1.00	30.16	BBBB
ATOM	5588	CA	LYS	B	237	-1.392	73.611	21.512	1.00	30.21	BBBB
ATOM	5589	CB	LYS	B	237	-0.955	73.488	22.968	1.00	27.01	BBBB
ATOM	5590	CG	LYS	B	237	-0.435	72.987	23.184	1.00	24.22	BBBB
ATOM	5591	CD	LYS	B	237	1.409	74.113	23.303	1.00	23.92	BBBB
ATOM	5592	CE	LYS	B	237	2.547	73.697	24.188	1.00	24.67	BBBB
ATOM	5593	NZ	LYS	B	237	3.128	72.391	23.773	1.00	25.54	BBBB
ATOM	5594	C	LYS	B	237	-2.843	73.168	21.431	1.00	32.02	BBBB
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ATOM	5599	CG	ASP	B	238	-5.620	69.277	20.377	1.00	34.04	BBBB
ATOM	5600	OD1	ASP	B	238	-6.395	69.862	19.591	1.00	34.61	BBBB
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ATOM	5603	O	ASP	B	238	-6.095	71.008	22.923	1.00	31.79	BBBB
ATOM	5604	N	THR	B	239	-3.977	71.306	23.637	1.00	31.23	BBBB
ATOM	5605	CA	THR	B	239	-4.305	71.256	25.051	1.00	31.25	BBBB
ATOM	5606	CB	THR	B	239	-4.529	69.820	25.508	1.00	31.46	BBBB
ATOM	5607	OG1	THR	B	239	-3.472	69.000	24.997	1.00	33.37	BBBB
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ATOM	5614	O	CYS	B	240	-2.320	70.837	29.178	1.00	24.84	BBBB
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ATOM	5616	SG	CYS	B	240	-3.600	75.377	28.182	1.00	28.19	BBBB
ATOM	5617	N	PRO	B	241	-0.327	71.729	28.604	1.00	25.15	BBBB
ATOM	5618	CD	PRO	B	241	0.441	72.768	27.901	1.00	26.50	BBBB
ATOM	5619	CA	PRO	B	241	0.583	70.762	29.235	1.00	25.78	BBBB
ATOM	5620	CB	PRO	B	241	1.894	71.517	29.263	1.00	24.59	BBBB

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ATOM	5625	CD	PRO	B	242	-0.324	68.069	29.756	1.00	24.14	BBBB
ATOM	5626	CA	PRO	B	242	-0.845	68.548	32.047	1.00	24.61	BBBB
ATOM	5627	CB	PRO	B	242	-1.211	67.122	31.668	1.00	23.97	BBBB
ATOM	5628	CG	PRO	B	242	-1.475	67.213	30.202	1.00	24.96	BBBB
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ATOM	5641	CB	MET	B	244	-0.157	64.516	37.077	1.00	29.96	BBBB
ATOM	5642	CG	MET	B	244	-0.349	64.930	38.535	1.00	33.69	BBBB
ATOM	5643	SD	MET	B	244	1.164	64.878	39.553	1.00	38.38	BBBB
ATOM	5644	CE	MET	B	244	1.564	66.625	39.632	1.00	37.21	BBBB
ATOM	5645	C	MET	B	244	1.108	64.740	34.941	1.00	27.55	BBBB
ATOM	5646	O	MET	B	244	1.056	65.391	33.907	1.00	27.42	BBBB
ATOM	5647	N	LEU	B	245	1.405	63.449	34.949	1.00	27.45	BBBB
ATOM	5648	CA	LEU	B	245	1.717	62.736	33.709	1.00	25.95	BBBB
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ATOM	5650	CG	LEU	B	245	2.920	63.628	31.542	1.00	22.88	BBBB
ATOM	5651	CD1	LEU	B	245	1.741	64.486	31.191	1.00	23.89	BBBB
ATOM	5652	CD2	LEU	B	245	4.175	64.313	31.126	1.00	23.50	BBBB
ATOM	5653	C	LEU	B	245	1.992	61.273	34.045	1.00	25.30	BBBB
ATOM	5654	O	LEU	B	245	3.056	60.955	34.566	1.00	23.59	BBBB
ATOM	5655	N	TYR	B	246	1.020	60.407	33.744	1.00	24.68	BBBB
ATOM	5656	CA	TYR	B	246	1.085	58.967	34.016	1.00	23.89	BBBB
ATOM	5657	CB	TYR	B	246	-0.082	58.252	33.378	1.00	24.22	BBBB
ATOM	5658	CG	TYR	B	246	-0.150	56.782	33.689	1.00	25.24	BBBB
ATOM	5659	CD1	TYR	B	246	-0.770	56.325	34.855	1.00	26.19	BBBB
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ATOM	5662	CE2	TYR	B	246	0.147	54.474	33.004	1.00	26.42	BBBB
ATOM	5663	CZ	TYR	B	246	-0.492	54.048	34.166	1.00	28.23	BBBB
ATOM	5664	OH	TYR	B	246	-0.726	52.703	34.368	1.00	32.13	BBBB
ATOM	5665	C	TYR	B	246	2.351	58.302	33.543	1.00	24.99	BBBB
ATOM	5666	O	TYR	B	246	2.829	58.548	32.441	1.00	25.75	BBBB
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ATOM	5668	CA	ASN	B	247	4.102	56.733	34.097	1.00	25.31	BBBB
ATOM	5669	CB	ASN	B	247	5.003	56.850	35.317	1.00	25.90	BBBB
ATOM	5670	CG	ASN	B	247	6.412	56.417	35.044	1.00	27.21	BBBB
ATOM	5671	OD1	ASN	B	247	6.648	55.433	34.343	1.00	27.71	BBBB
ATOM	5672	ND2	ASN	B	247	7.368	57.140	35.614	1.00	26.90	BBBB
ATOM	5673	C	ASN	B	247	3.798	55.281	33.805	1.00	26.23	BBBB
ATOM	5674	O	ASN	B	247	3.486	54.524	34.692	1.00	27.58	BBBB
ATOM	5675	N	PRO	B	248	3.901	54.864	32.552	1.00	28.38	BBBB
ATOM	5676	CD	PRO	B	248	4.289	55.615	31.353	1.00	28.12	BBBB
ATOM	5677	CA	PRO	B	248	3.612	53.463	32.224	1.00	29.88	BBBB
ATOM	5678	CB	PRO	B	248	3.829	53.414	30.712	1.00	30.15	BBBB
ATOM	5679	CG	PRO	B	248	3.602	54.834	30.275	1.00	28.88	BBBB
ATOM	5680	C	PRO	B	248	4.476	52.418	32.948	1.00	30.52	BBBB
ATOM	5681	O	PRO	B	248	4.021	51.320	33.196	1.00	32.33	BBBB
ATOM	5682	N	THR	B	249	5.714	52.769	33.281	1.00	31.26	BBBB
ATOM	5683	CA	THR	B	249	6.651	51.858	33.945	1.00	31.64	BBBB
ATOM	5684	CB	THR	B	249	8.108	52.292	33.691	1.00	32.74	BBBB
ATOM	5685	OG1	THR	B	249	8.507	51.907	32.367	1.00	32.45	BBBB
ATOM	5686	CG2	THR	B	249	9.042	51.675	34.734	1.00	33.08	BBBB
ATOM	5687	C	THR	B	249	6.505	51.690	35.455	1.00	32.06	BBBB
ATOM	5688	O	THR	B	249	6.834	50.648	35.996	1.00	32.71	BBBB
ATOM	5689	N	THR	B	250	6.028	52.718	36.137	1.00	32.83	BBBB
ATOM	5690	CA	THR	B	250	5.878	52.663	37.578	1.00	31.01	BBBB
ATOM	5691	CB	THR	B	250	6.700	53.798	38.214	1.00	29.66	BBBB
ATOM	5692	OG1	THR	B	250	6.788	53.593	39.624	1.00	32.48	BBBB
ATOM	5693	CG2	THR	B	250	6.064	55.139	37.942	1.00	26.62	BBBB
ATOM	5694	C	THR	B	250	4.404	52.771	37.975	1.00	31.25	BBBB
ATOM	5695	O	THR	B	250	4.068	52.982	39.130	1.00	31.07	BBBB

ATOM	5696	N	TYR	B	251	3.535	52.604	36.990	1.00	31.81	BBBB
ATOM	5697	CA	TYR	B	251	2.090	52.683	37.159	1.00	31.87	BBBB
ATOM	5698	CB	TYR	B	251	1.519	51.325	37.543	1.00	33.05	BBBB
ATOM	5699	CG	TYR	B	251	1.656	50.285	36.465	1.00	34.20	BBBB
ATOM	5700	CD1	TYR	B	251	2.914	49.796	36.096	1.00	33.93	BBBB
ATOM	5701	CE1	TYR	B	251	3.047	48.823	35.109	1.00	34.53	BBBB
ATOM	5702	CD2	TYR	B	251	0.531	49.779	35.819	1.00	33.68	BBBB
ATOM	5703	CE2	TYR	B	251	0.650	48.803	34.826	1.00	34.88	BBBB
ATOM	5704	CZ	TYR	B	251	1.909	48.329	34.477	1.00	34.89	BBBB
ATOM	5705	OH	TYR	B	251	2.030	47.368	33.503	1.00	33.50	BBBB
ATOM	5706	C	TYR	B	251	1.558	53.741	38.109	1.00	31.84	BBBB
ATOM	5707	O	TYR	B	251	0.493	53.582	38.692	1.00	32.93	BBBB
ATOM	5708	N	GLN	B	252	2.301	54.821	38.284	1.00	31.40	BBBB
ATOM	5709	CA	GLN	B	252	1.808	55.904	39.106	1.00	31.92	BBBB
ATOM	5710	CB	GLN	B	252	2.514	55.930	40.460	1.00	32.82	BBBB
ATOM	5711	CG	GLN	B	252	4.011	56.047	40.431	1.00	35.01	BBBB
ATOM	5712	CD	GLN	B	252	4.585	56.090	41.839	1.00	37.86	BBBB
ATOM	5713	OE1	GLN	B	252	4.269	56.990	42.625	1.00	39.67	BBBB
ATOM	5714	NE2	GLN	B	252	5.423	55.112	42.170	1.00	38.74	BBBB
ATOM	5715	C	GLN	B	252	1.948	57.243	38.360	1.00	32.30	BBBB
ATOM	5716	O	GLN	B	252	2.409	57.297	37.220	1.00	30.23	BBBB
ATOM	5717	N	MET	B	253	1.522	58.326	38.994	1.00	33.73	BBBB
ATOM	5718	CA	MET	B	253	1.596	59.631	38.366	1.00	33.52	BBBB
ATOM	5719	CB	MET	B	253	0.432	60.488	38.823	1.00	33.17	BBBB
ATOM	5720	CG	MET	B	253	-0.139	61.279	37.713	1.00	34.85	BBBB
ATOM	5721	SD	MET	B	253	-0.753	60.120	36.552	1.00	37.25	BBBB
ATOM	5722	CE	MET	B	253	-2.309	59.857	37.218	1.00	38.52	BBBB
ATOM	5723	C	MET	B	253	2.886	60.341	38.705	1.00	34.16	BBBB
ATOM	5724	O	MET	B	253	3.437	60.138	39.779	1.00	34.77	BBBB
ATOM	5725	N	ASP	B	254	3.367	61.172	37.786	1.00	34.97	BBBB
ATOM	5726	CA	ASP	B	254	4.585	61.932	38.019	1.00	36.06	BBBB
ATOM	5727	CB	ASP	B	254	5.705	61.453	37.108	1.00	35.07	BBBB
ATOM	5728	CG	ASP	B	254	6.380	60.197	37.628	1.00	33.96	BBBB
ATOM	5729	OD1	ASP	B	254	7.241	59.640	36.917	1.00	33.29	BBBB
ATOM	5730	OD2	ASP	B	254	6.052	59.768	38.752	1.00	34.00	BBBB
ATOM	5731	C	ASP	B	254	4.321	63.412	37.818	1.00	38.42	BBBB
ATOM	5732	O	ASP	B	254	3.289	63.797	37.281	1.00	38.79	BBBB
ATOM	5733	N	VAL	B	255	5.252	64.242	38.261	1.00	40.51	BBBB
ATOM	5734	CA	VAL	B	255	5.078	65.678	38.163	1.00	43.14	BBBB
ATOM	5735	CB	VAL	B	255	5.978	66.394	39.165	1.00	42.69	BBBB
ATOM	5736	CG1	VAL	B	255	5.562	67.843	39.284	1.00	41.93	BBBB
ATOM	5737	CG2	VAL	B	255	5.908	65.696	40.507	1.00	42.91	BBBB
ATOM	5738	C	VAL	B	255	5.344	66.244	36.775	1.00	45.81	BBBB
ATOM	5739	O	VAL	B	255	4.449	66.814	36.155	1.00	46.76	BBBB
ATOM	5740	N	ASN	B	256	6.574	66.102	36.291	1.00	48.01	BBBB
ATOM	5741	CA	ASN	B	256	6.931	66.611	34.966	1.00	50.39	BBBB
ATOM	5742	CB	ASN	B	256	6.303	65.725	33.874	1.00	54.07	BBBB
ATOM	5743	CG	ASN	B	256	6.909	64.311	33.832	1.00	55.04	BBBB
ATOM	5744	OD1	ASN	B	256	6.586	63.451	34.660	1.00	52.86	BBBB
ATOM	5745	ND2	ASN	B	256	7.797	64.077	32.860	1.00	55.74	BBBB
ATOM	5746	C	ASN	B	256	6.528	68.088	34.777	1.00	49.68	BBBB
ATOM	5747	O	ASN	B	256	5.371	68.409	34.493	1.00	49.11	BBBB
ATOM	5748	N	PRO	B	257	7.517	68.990	34.908	1.00	49.29	BBBB
ATOM	5749	CD	PRO	B	257	8.872	68.417	34.947	1.00	49.49	BBBB
ATOM	5750	CA	PRO	B	257	7.618	70.456	34.837	1.00	48.97	BBBB
ATOM	5751	CB	PRO	B	257	9.122	70.686	34.719	1.00	49.73	BBBB
ATOM	5752	CG	PRO	B	257	9.685	69.567	35.468	1.00	50.08	BBBB
ATOM	5753	C	PRO	B	257	6.864	71.313	33.826	1.00	47.52	BBBB
ATOM	5754	O	PRO	B	257	6.376	72.386	34.173	1.00	48.37	BBBB
ATOM	5755	N	GLU	B	258	6.785	70.880	32.580	1.00	45.44	BBBB
ATOM	5756	CA	GLU	B	258	6.113	71.694	31.581	1.00	43.34	BBBB
ATOM	5757	CB	GLU	B	258	6.350	71.095	30.192	1.00	45.17	BBBB
ATOM	5758	CG	GLU	B	258	7.831	70.947	29.881	1.00	48.42	BBBB
ATOM	5759	CD	GLU	B	258	8.608	72.239	30.150	1.00	52.35	BBBB
ATOM	5760	OE1	GLU	B	258	8.540	73.164	29.301	1.00	53.05	BBBB
ATOM	5761	OE2	GLU	B	258	9.274	72.334	31.219	1.00	51.63	BBBB
ATOM	5762	C	GLU	B	258	4.626	71.902	31.837	1.00	40.42	BBBB
ATOM	5763	O	GLU	B	258	3.880	72.211	30.920	1.00	39.87	BBBB
ATOM	5764	N	GLY	B	259	4.207	71.754	33.088	1.00	37.51	BBBB
ATOM	5765	CA	GLY	B	259	2.809	71.921	33.435	1.00	35.62	BBBB
ATOM	5766	C	GLY	B	259	2.340	73.360	33.380	1.00	34.73	BBBB
ATOM	5767	O	GLY	B	259	3.079	74.277	33.723	1.00	34.55	BBBB
ATOM	5768	N	LYS	B	260	1.098	73.552	32.952	1.00	33.20	BBBB
ATOM	5769	CA	LYS	B	260	0.506	74.875	32.824	1.00	31.73	BBBB
ATOM	5770	CB	LYS	B	260	0.719	75.408	31.406	1.00	32.19	BBBB

ATOM	5771	CG	LYS	B	260	2.168	75.693	31.034	1.00	33.45	BBBB
ATOM	5772	CD	LYS	B	260	2.671	77.005	31.636	1.00	35.88	BBBB
ATOM	5773	CE	LYS	B	260	4.168	77.217	31.371	1.00	37.63	BBBB
ATOM	5774	NZ	LYS	B	260	4.544	77.146	29.921	1.00	36.90	BBBB
ATOM	5775	C	LYS	B	260	-0.986	74.777	33.110	1.00	31.80	BBBB
ATOM	5776	O	LYS	B	260	-1.565	73.693	33.068	1.00	31.25	BBBB
ATOM	5777	N	TYR	B	261	-1.613	75.907	33.408	1.00	31.52	BBBB
ATOM	5778	CA	TYR	B	261	-3.035	75.892	33.693	1.00	31.81	BBBB
ATOM	5779	CB	TYR	B	261	-3.345	76.707	34.956	1.00	32.28	BBBB
ATOM	5780	CG	TYR	B	261	-2.831	76.108	36.247	1.00	30.77	BBBB
ATOM	5781	CD1	TYR	B	261	-1.514	76.296	36.644	1.00	30.43	BBBB
ATOM	5782	CE1	TYR	B	261	-1.025	75.720	37.792	1.00	28.46	BBBB
ATOM	5783	CD2	TYR	B	261	-3.650	75.324	37.049	1.00	29.63	BBBB
ATOM	5784	CE2	TYR	B	261	-3.168	74.746	38.196	1.00	29.53	BBBB
ATOM	5785	CZ	TYR	B	261	-1.850	74.944	38.559	1.00	29.22	BBBB
ATOM	5786	OH	TYR	B	261	-1.333	74.335	39.676	1.00	30.60	BBBB
ATOM	5787	C	TYR	B	261	-3.861	76.414	32.517	1.00	32.46	BBBB
ATOM	5788	O	TYR	B	261	-3.429	77.310	31.777	1.00	30.84	BBBB
ATOM	5789	N	SER	B	262	-5.061	75.844	32.378	1.00	32.23	BBBB
ATOM	5790	CA	SER	B	262	-6.000	76.179	31.310	1.00	31.71	BBBB
ATOM	5791	CB	SER	B	262	-6.937	74.997	31.022	1.00	31.61	BBBB
ATOM	5792	OG	SER	B	262	-6.397	74.116	30.052	1.00	34.61	BBBB
ATOM	5793	C	SER	B	262	-6.859	77.390	31.568	1.00	30.78	BBBB
ATOM	5794	O	SER	B	262	-7.956	77.268	32.089	1.00	31.41	BBBB
ATOM	5795	N	PHE	B	263	-6.379	78.564	31.195	1.00	30.44	BBBB
ATOM	5796	CA	PHE	B	263	-7.191	79.751	31.389	1.00	30.48	BBBB
ATOM	5797	CB	PHE	B	263	-6.374	80.864	32.055	1.00	27.55	BBBB
ATOM	5798	CG	PHE	B	263	-7.175	82.100	32.358	1.00	23.44	BBBB
ATOM	5799	CD1	PHE	B	263	-8.490	82.000	32.768	1.00	20.60	BBBB
ATOM	5800	CD2	PHE	B	263	-6.608	83.363	32.234	1.00	23.74	BBBB
ATOM	5801	CE1	PHE	B	263	-9.227	83.123	33.051	1.00	19.48	BBBB
ATOM	5802	CE2	PHE	B	263	-7.342	84.501	32.516	1.00	21.48	BBBB
ATOM	5803	CZ	PHE	B	263	-8.657	84.378	32.927	1.00	20.24	BBBB
ATOM	5804	C	PHE	B	263	-7.769	80.215	30.049	1.00	31.56	BBBB
ATOM	5805	O	PHE	B	263	-7.050	80.711	29.170	1.00	31.67	BBBB
ATOM	5806	N	GLY	B	264	-9.075	80.029	29.891	1.00	31.60	BBBB
ATOM	5807	CA	GLY	B	264	-9.721	80.437	28.661	1.00	32.58	BBBB
ATOM	5808	C	GLY	B	264	-9.086	79.786	27.455	1.00	32.74	BBBB
ATOM	5809	O	GLY	B	264	-9.330	78.619	27.193	1.00	33.50	BBBB
ATOM	5810	N	ALA	B	265	-8.267	80.527	26.721	1.00	32.63	BBBB
ATOM	5811	CA	ALA	B	265	-7.624	79.967	25.540	1.00	32.82	BBBB
ATOM	5812	CB	ALA	B	265	-8.092	80.690	24.293	1.00	32.58	BBBB
ATOM	5813	C	ALA	B	265	-6.108	80.013	25.630	1.00	32.85	BBBB
ATOM	5814	O	ALA	B	265	-5.402	79.783	24.650	1.00	33.44	BBBB
ATOM	5815	N	THR	B	266	-5.604	80.308	26.812	1.00	32.34	BBBB
ATOM	5816	CA	THR	B	266	-4.173	80.360	26.996	1.00	33.97	BBBB
ATOM	5817	CB	THR	B	266	-3.766	81.690	27.604	1.00	35.16	BBBB
ATOM	5818	OG1	THR	B	266	-4.619	81.972	28.721	1.00	35.86	BBBB
ATOM	5819	CG2	THR	B	266	-3.876	82.793	26.585	1.00	37.32	BBBB
ATOM	5820	C	THR	B	266	-3.716	79.262	27.948	1.00	33.49	BBBB
ATOM	5821	O	THR	B	266	-4.532	78.582	28.568	1.00	34.20	BBBB
ATOM	5822	N	CYS	B	267	-2.406	79.076	28.041	1.00	32.24	BBBB
ATOM	5823	CA	CYS	B	267	-1.858	78.115	28.976	1.00	32.03	BBBB
ATOM	5824	C	CYS	B	267	-1.008	78.934	29.945	1.00	32.18	BBBB
ATOM	5825	O	CYS	B	267	0.140	79.284	29.667	1.00	31.11	BBBB
ATOM	5826	CB	CYS	B	267	-1.029	77.061	28.256	1.00	31.33	BBBB
ATOM	5827	SG	CYS	B	267	-2.008	76.050	27.114	1.00	29.65	BBBB
ATOM	5828	N	VAL	B	268	-1.607	79.239	31.088	1.00	32.98	BBBB
ATOM	5829	CA	VAL	B	268	-0.979	80.053	32.114	1.00	34.52	BBBB
ATOM	5830	CB	VAL	B	268	-2.072	80.785	32.910	1.00	32.91	BBBB
ATOM	5831	CG1	VAL	B	268	-3.209	81.144	31.992	1.00	32.20	BBBB
ATOM	5832	CG2	VAL	B	268	-2.588	79.913	34.017	1.00	33.36	BBBB
ATOM	5833	C	VAL	B	268	-0.095	79.261	33.083	1.00	36.42	BBBB
ATOM	5834	O	VAL	B	268	-0.102	78.029	33.086	1.00	37.76	BBBB
ATOM	5835	N	LYS	B	269	0.665	79.978	33.907	1.00	37.67	BBBB
ATOM	5836	CA	LYS	B	269	1.532	79.346	34.900	1.00	37.66	BBBB
ATOM	5837	CB	LYS	B	269	2.916	80.015	34.921	1.00	37.26	BBBB
ATOM	5838	CG	LYS	B	269	2.891	81.537	35.043	0.01	36.86	BBBB
ATOM	5839	CD	LYS	B	269	2.379	81.997	36.399	0.01	36.54	BBBB
ATOM	5840	CE	LYS	B	269	2.329	83.515	36.488	0.01	36.35	BBBB
ATOM	5841	NZ	LYS	B	269	1.795	83.974	37.800	0.01	36.22	BBBB
ATOM	5842	C	LYS	B	269	0.895	79.383	36.293	1.00	37.17	BBBB
ATOM	5843	O	LYS	B	269	1.467	78.867	37.246	1.00	37.98	BBBB
ATOM	5844	N	LYS	B	270	-0.286	79.992	36.392	1.00	36.07	BBBB
ATOM	5845	CA	LYS	B	270	-1.045	80.087	37.642	1.00	36.31	BBBB

ATOM	5846	CB	LYS	B	270	-0.329	81.002	38.643	1.00	35.48	BBBB
ATOM	5847	CG	LYS	B	270	-1.110	81.211	39.947	1.00	35.62	BBBB
ATOM	5848	CD	LYS	B	270	-0.374	82.110	40.926	1.00	35.25	BBBB
ATOM	5849	CE	LYS	B	270	-1.156	82.279	42.219	0.01	34.89	BBBB
ATOM	5850	NZ	LYS	B	270	-0.439	83.146	43.195	0.01	34.79	BBBB
ATOM	5851	C	LYS	B	270	-2.466	80.623	37.398	1.00	37.45	BBBB
ATOM	5852	O	LYS	B	270	-2.639	81.695	36.812	1.00	38.20	BBBB
ATOM	5853	N	CYS	B	271	-3.488	79.893	37.833	1.00	37.90	BBBB
ATOM	5854	CA	CYS	B	271	-4.847	80.380	37.635	1.00	39.89	BBBB
ATOM	5855	C	CYS	B	271	-5.063	81.679	38.371	1.00	41.63	BBBB
ATOM	5856	O	CYS	B	271	-4.917	81.742	39.586	1.00	41.83	BBBB
ATOM	5857	CB	CYS	B	271	-5.887	79.385	38.129	1.00	40.31	BBBB
ATOM	5858	SG	CYS	B	271	-6.305	78.120	36.909	1.00	42.01	BBBB
ATOM	5859	N	PRO	B	272	-5.426	82.741	37.644	1.00	44.20	BBBB
ATOM	5860	CD	PRO	B	272	-5.715	82.816	36.199	1.00	45.56	BBBB
ATOM	5861	CA	PRO	B	272	-5.657	84.034	38.290	1.00	44.59	BBBB
ATOM	5862	CB	PRO	B	272	-6.387	84.816	37.210	1.00	44.78	BBBB
ATOM	5863	CG	PRO	B	272	-5.734	84.307	35.955	1.00	45.11	BBBB
ATOM	5864	C	PRO	B	272	-6.518	83.800	39.515	1.00	45.31	BBBB
ATOM	5865	O	PRO	B	272	-7.390	82.930	39.484	1.00	46.55	BBBB
ATOM	5866	N	ARG	B	273	-6.277	84.543	40.592	1.00	45.55	BBBB
ATOM	5867	CA	ARG	B	273	-7.084	84.375	41.798	1.00	46.51	BBBB
ATOM	5868	CB	ARG	B	273	-6.679	85.410	42.851	1.00	45.88	BBBB
ATOM	5869	CG	ARG	B	273	-5.222	85.323	43.284	0.01	46.49	BBBB
ATOM	5870	CD	ARG	B	273	-4.907	83.972	43.911	0.01	46.78	BBBB
ATOM	5871	NE	ARG	B	273	-3.507	83.858	44.310	0.01	47.15	BBBB
ATOM	5872	CZ	ARG	B	273	-2.926	84.611	45.240	0.01	47.34	BBBB
ATOM	5873	NH1	ARG	B	273	-3.624	85.542	45.876	0.01	47.43	BBBB
ATOM	5874	NH2	ARG	B	273	-1.646	84.432	45.535	0.01	47.45	BBBB
ATOM	5875	C	ARG	B	273	-8.552	84.551	41.387	1.00	47.71	BBBB
ATOM	5876	O	ARG	B	273	-8.863	84.515	40.194	1.00	50.07	BBBB
ATOM	5877	N	ASN	B	274	-9.463	84.734	42.337	1.00	47.78	BBBB
ATOM	5878	CA	ASN	B	274	-10.878	84.907	41.981	1.00	46.97	BBBB
ATOM	5879	CB	ASN	B	274	-11.076	86.163	41.119	1.00	46.27	BBBB
ATOM	5880	CG	ASN	B	274	-10.642	87.433	41.829	0.01	46.43	BBBB
ATOM	5881	OD1	ASN	B	274	-10.705	88.525	41.264	0.01	46.34	BBBB
ATOM	5882	ND2	ASN	B	274	-10.199	87.296	43.074	0.01	46.29	BBBB
ATOM	5883	C	ASN	B	274	-11.387	83.696	41.216	1.00	46.32	BBBB
ATOM	5884	O	ASN	B	274	-12.566	83.368	41.282	1.00	46.13	BBBB
ATOM	5885	N	TYR	B	275	-10.488	83.047	40.482	1.00	46.42	BBBB
ATOM	5886	CA	TYR	B	275	-10.806	81.857	39.710	1.00	46.56	BBBB
ATOM	5887	CB	TYR	B	275	-9.956	81.797	38.439	1.00	49.81	BBBB
ATOM	5888	CG	TYR	B	275	-10.491	82.621	37.289	1.00	53.93	BBBB
ATOM	5889	CD1	TYR	B	275	-9.864	83.808	36.902	1.00	54.16	BBBB
ATOM	5890	CE1	TYR	B	275	-10.373	84.575	35.853	1.00	56.54	BBBB
ATOM	5891	CD2	TYR	B	275	-11.641	82.220	36.596	1.00	54.61	BBBB
ATOM	5892	CE2	TYR	B	275	-12.159	82.979	35.549	1.00	55.74	BBBB
ATOM	5893	CZ	TYR	B	275	-11.523	84.157	35.181	1.00	57.07	BBBB
ATOM	5894	OH	TYR	B	275	-12.032	84.920	34.150	1.00	57.61	BBBB
ATOM	5895	C	TYR	B	275	-10.557	80.593	40.525	1.00	45.17	BBBB
ATOM	5896	O	TYR	B	275	-9.558	80.477	41.238	1.00	45.56	BBBB
ATOM	5897	N	VAL	B	276	-11.477	79.646	40.413	1.00	42.15	BBBB
ATOM	5898	CA	VAL	B	276	-11.367	78.379	41.110	1.00	38.89	BBBB
ATOM	5899	CB	VAL	B	276	-12.683	77.623	41.027	1.00	37.54	BBBB
ATOM	5900	CG1	VAL	B	276	-12.626	76.391	41.892	1.00	37.31	BBBB
ATOM	5901	CG2	VAL	B	276	-13.822	78.537	41.419	1.00	36.09	BBBB
ATOM	5902	C	VAL	B	276	-10.285	77.524	40.453	1.00	38.51	BBBB
ATOM	5903	O	VAL	B	276	-10.379	77.221	39.272	1.00	38.90	BBBB
ATOM	5904	N	VAL	B	277	-9.261	77.139	41.207	1.00	37.52	BBBB
ATOM	5905	CA	VAL	B	277	-8.193	76.310	40.659	1.00	37.66	BBBB
ATOM	5906	CB	VAL	B	277	-6.848	76.681	41.279	1.00	36.68	BBBB
ATOM	5907	CG1	VAL	B	277	-5.735	75.896	40.625	1.00	35.74	BBBB
ATOM	5908	CG2	VAL	B	277	-6.608	78.155	41.107	1.00	37.63	BBBB
ATOM	5909	C	VAL	B	277	-8.478	74.839	40.933	1.00	38.88	BBBB
ATOM	5910	O	VAL	B	277	-8.657	74.451	42.079	1.00	39.21	BBBB
ATOM	5911	N	THR	B	278	-8.514	74.016	39.886	1.00	40.23	BBBB
ATOM	5912	CA	THR	B	278	-8.804	72.588	40.060	1.00	42.52	BBBB
ATOM	5913	CB	THR	B	278	-9.685	72.044	38.933	1.00	41.50	BBBB
ATOM	5914	OG1	THR	B	278	-8.891	71.869	37.754	1.00	40.94	BBBB
ATOM	5915	CG2	THR	B	278	-10.819	72.991	38.646	1.00	42.43	BBBB
ATOM	5916	C	THR	B	278	-7.610	71.638	40.142	1.00	44.04	BBBB
ATOM	5917	O	THR	B	278	-6.444	72.045	40.209	1.00	43.09	BBBB
ATOM	5918	N	ASP	B	279	-7.936	70.349	40.127	1.00	45.34	BBBB
ATOM	5919	CA	ASP	B	279	-6.937	69.297	40.188	1.00	47.33	BBBB
ATOM	5920	CB	ASP	B	279	-7.472	68.147	41.033	1.00	48.99	BBBB

ATOM	5921	CG	ASP	B	279	-8.190	68.638	42.271	1.00	50.86	BBBB
ATOM	5922	OD1	ASP	B	279	-7.808	69.722	42.766	1.00	52.20	BBBB
ATOM	5923	OD2	ASP	B	279	-9.121	67.944	42.748	1.00	51.73	BBBB
ATOM	5924	C	ASP	B	279	-6.545	68.814	38.787	1.00	47.70	BBBB
ATOM	5925	O	ASP	B	279	-7.375	68.345	38.004	1.00	47.16	BBBB
ATOM	5926	N	HIS	B	280	-5.256	68.953	38.503	1.00	48.05	BBBB
ATOM	5927	CA	HIS	B	280	-4.628	68.590	37.236	1.00	48.90	BBBB
ATOM	5928	CB	HIS	B	280	-5.358	67.427	36.531	1.00	49.57	BBBB
ATOM	5929	CG	HIS	B	280	-4.833	66.064	36.895	1.00	47.32	BBBB
ATOM	5930	CD2	HIS	B	280	-4.008	65.661	37.890	1.00	45.95	BBBB
ATOM	5931	ND1	HIS	B	280	-5.186	64.922	36.207	1.00	45.83	BBBB
ATOM	5932	CE1	HIS	B	280	-4.604	63.875	36.764	1.00	45.37	BBBB
ATOM	5933	NE2	HIS	B	280	-3.885	64.296	37.788	1.00	45.74	BBBB
ATOM	5934	C	HIS	B	280	-4.434	69.785	36.285	1.00	48.76	BBBB
ATOM	5935	O	HIS	B	280	-3.797	69.639	35.230	1.00	49.27	BBBB
ATOM	5936	N	GLY	B	281	-4.991	70.952	36.628	1.00	46.90	BBBB
ATOM	5937	CA	GLY	B	281	-4.714	72.127	35.812	1.00	44.61	BBBB
ATOM	5938	C	GLY	B	281	-5.619	73.080	35.050	1.00	42.86	BBBB
ATOM	5939	O	GLY	B	281	-5.273	73.407	33.917	1.00	43.86	BBBB
ATOM	5940	N	SER	B	282	-6.717	73.568	35.622	1.00	40.64	BBBB
ATOM	5941	CA	SER	B	282	-7.567	74.512	34.883	1.00	38.36	BBBB
ATOM	5942	CB	SER	B	282	-8.381	73.771	33.816	1.00	36.48	BBBB
ATOM	5943	OG	SER	B	282	-9.081	72.673	34.349	1.00	32.03	BBBB
ATOM	5944	C	SER	B	282	-8.496	75.380	35.736	1.00	38.17	BBBB
ATOM	5945	O	SER	B	282	-9.045	74.921	36.738	1.00	36.75	BBBB
ATOM	5946	N	CYS	B	283	-8.662	76.642	35.328	1.00	38.67	BBBB
ATOM	5947	CA	CYS	B	283	-9.514	77.590	36.048	1.00	38.28	BBBB
ATOM	5948	C	CYS	B	283	-10.949	77.457	35.581	1.00	38.00	BBBB
ATOM	5949	O	CYS	B	283	-11.211	77.256	34.407	1.00	37.32	BBBB
ATOM	5950	CB	CYS	B	283	-9.025	79.016	35.834	1.00	38.60	BBBB
ATOM	5951	SG	CYS	B	283	-7.259	79.121	35.423	1.00	40.29	BBBB
ATOM	5952	N	VAL	B	284	-11.880	77.584	36.509	1.00	39.44	BBBB
ATOM	5953	CA	VAL	B	284	-13.281	77.411	36.190	1.00	41.82	BBBB
ATOM	5954	CB	VAL	B	284	-13.728	76.024	36.690	1.00	41.48	BBBB
ATOM	5955	CG1	VAL	B	284	-15.167	75.755	36.321	1.00	43.28	BBBB
ATOM	5956	CG2	VAL	B	284	-12.826	74.963	36.095	1.00	41.49	BBBB
ATOM	5957	C	VAL	B	284	-14.155	78.507	36.802	1.00	44.33	BBBB
ATOM	5958	O	VAL	B	284	-13.729	79.215	37.702	1.00	44.62	BBBB
ATOM	5959	N	ARG	B	285	-15.374	78.652	36.299	1.00	45.46	BBBB
ATOM	5960	CA	ARG	B	285	-16.284	79.662	36.812	1.00	46.98	BBBB
ATOM	5961	CB	ARG	B	285	-17.307	80.068	35.750	1.00	45.24	BBBB
ATOM	5962	CG	ARG	B	285	-16.736	80.588	34.440	1.00	42.67	BBBB
ATOM	5963	CD	ARG	B	285	-16.036	81.925	34.583	1.00	39.39	BBBB
ATOM	5964	NE	ARG	B	285	-15.804	82.548	33.284	1.00	37.45	BBBB
ATOM	5965	CZ	ARG	B	285	-15.071	83.640	33.102	1.00	36.49	BBBB
ATOM	5966	NH1	ARG	B	285	-14.494	84.236	34.133	1.00	34.30	BBBB
ATOM	5967	NH2	ARG	B	285	-14.911	84.134	31.887	1.00	34.86	BBBB
ATOM	5968	C	ARG	B	285	-17.041	79.096	37.993	1.00	48.83	BBBB
ATOM	5969	O	ARG	B	285	-17.425	79.832	38.895	1.00	50.88	BBBB
ATOM	5970	N	ALA	B	286	-17.270	77.788	37.981	1.00	50.82	BBBB
ATOM	5971	CA	ALA	B	286	-18.017	77.148	39.055	1.00	55.65	BBBB
ATOM	5972	CB	ALA	B	286	-19.508	77.288	38.786	1.00	55.62	BBBB
ATOM	5973	C	ALA	B	286	-17.676	75.677	39.251	1.00	57.86	BBBB
ATOM	5974	O	ALA	B	286	-17.529	74.938	38.288	1.00	58.81	BBBB
ATOM	5975	N	CYS	B	287	-17.561	75.255	40.505	1.00	60.73	BBBB
ATOM	5976	CA	CYS	B	287	-17.264	73.865	40.808	1.00	64.61	BBBB
ATOM	5977	C	CYS	B	287	-18.320	72.956	40.191	1.00	66.67	BBBB
ATOM	5978	O	CYS	B	287	-19.154	73.400	39.397	1.00	67.35	BBBB
ATOM	5979	CB	CYS	B	287	-17.255	73.624	42.319	1.00	64.76	BBBB
ATOM	5980	SG	CYS	B	287	-16.072	74.601	43.282	1.00	67.58	BBBB
ATOM	5981	N	GLY	B	288	-18.279	71.684	40.581	1.00	68.50	BBBB
ATOM	5982	CA	GLY	B	288	-19.241	70.717	40.092	1.00	70.63	BBBB
ATOM	5983	C	GLY	B	288	-20.430	70.624	41.030	1.00	72.62	BBBB
ATOM	5984	O	GLY	B	288	-20.279	70.727	42.246	1.00	71.21	BBBB
ATOM	5985	N	ALA	B	289	-21.613	70.422	40.462	1.00	74.39	BBBB
ATOM	5986	CA	ALA	B	289	-22.847	70.331	41.236	1.00	77.43	BBBB
ATOM	5987	CB	ALA	B	289	-23.932	69.669	40.395	1.00	77.59	BBBB
ATOM	5988	C	ALA	B	289	-22.724	69.616	42.583	1.00	78.69	BBBB
ATOM	5989	O	ALA	B	289	-23.323	70.036	43.569	1.00	79.62	BBBB
ATOM	5990	N	ALA	B	290	-21.953	68.537	42.633	1.00	79.77	BBBB
ATOM	5991	CA	ALA	B	290	-21.802	67.797	43.878	1.00	81.15	BBBB
ATOM	5992	CB	ALA	B	290	-21.727	66.311	43.588	1.00	81.42	BBBB
ATOM	5993	C	ALA	B	290	-20.573	68.235	44.657	1.00	82.10	BBBB
ATOM	5994	O	ALA	B	290	-19.674	67.433	44.899	1.00	82.58	BBBB
ATOM	5995	N	SER	B	291	-20.544	69.508	45.049	1.00	83.01	BBBB

ATOM	5996	CA	SER	B	291	-19.424	70.072	45.809	1.00	82.99	BBBB
ATOM	5997	CB	SER	B	291	-18.160	70.136	44.936	1.00	83.86	BBBB
ATOM	5998	OG	SER	B	291	-17.784	68.862	44.437	1.00	84.16	BBBB
ATOM	5999	C	SER	B	291	-19.762	71.484	46.305	1.00	82.21	BBBB
ATOM	6000	O	SER	B	291	-20.895	71.944	46.171	1.00	81.64	BBBB
ATOM	6001	N	TYR	B	292	-18.770	72.158	46.883	1.00	81.12	BBBB
ATOM	6002	CA	TYR	B	292	-18.933	73.525	47.368	1.00	80.68	BBBB
ATOM	6003	CB	TYR	B	292	-19.441	73.539	48.823	1.00	80.62	BBBB
ATOM	6004	CG	TYR	B	292	-18.391	73.331	49.885	1.00	81.05	BBBB
ATOM	6005	CD1	TYR	B	292	-17.412	74.288	50.117	1.00	81.11	BBBB
ATOM	6006	CE1	TYR	B	292	-16.435	74.102	51.080	1.00	81.93	BBBB
ATOM	6007	CD2	TYR	B	292	-18.371	72.173	50.653	1.00	81.59	BBBB
ATOM	6008	CE2	TYR	B	292	-17.396	71.975	51.625	1.00	82.84	BBBB
ATOM	6009	CZ	TYR	B	292	-16.430	72.945	51.830	1.00	82.84	BBBB
ATOM	6010	OH	TYR	B	292	-15.448	72.754	52.773	1.00	83.68	BBBB
ATOM	6011	C	TYR	B	292	-17.575	74.215	47.238	1.00	80.02	BBBB
ATOM	6012	O	TYR	B	292	-16.543	73.544	47.222	1.00	79.98	BBBB
ATOM	6013	N	GLU	B	293	-17.573	75.544	47.146	1.00	79.12	BBBB
ATOM	6014	CA	GLU	B	293	-16.330	76.295	46.978	1.00	78.49	BBBB
ATOM	6015	CB	GLU	B	293	-16.593	77.596	46.211	1.00	76.82	BBBB
ATOM	6016	CG	GLU	B	293	-15.494	77.941	45.206	1.00	74.78	BBBB
ATOM	6017	CD	GLU	B	293	-15.598	79.348	44.650	1.00	73.38	BBBB
ATOM	6018	OE1	GLU	B	293	-15.077	80.285	45.285	1.00	71.45	BBBB
ATOM	6019	OE2	GLU	B	293	-16.203	79.518	43.575	1.00	73.24	BBBB
ATOM	6020	C	GLU	B	293	-15.617	76.626	48.277	1.00	78.86	BBBB
ATOM	6021	O	GLU	B	293	-16.236	76.682	49.332	1.00	79.12	BBBB
ATOM	6022	N	MET	B	294	-14.312	76.857	48.186	1.00	79.43	BBBB
ATOM	6023	CA	MET	B	294	-13.498	77.197	49.346	1.00	80.97	BBBB
ATOM	6024	CB	MET	B	294	-13.468	76.037	50.322	1.00	82.63	BBBB
ATOM	6025	CG	MET	B	294	-13.045	74.749	49.684	1.00	84.35	BBBB
ATOM	6026	SD	MET	B	294	-12.597	73.581	50.935	1.00	86.79	BBBB
ATOM	6027	CE	MET	B	294	-10.878	74.084	51.208	1.00	86.83	BBBB
ATOM	6028	C	MET	B	294	-12.083	77.516	48.895	1.00	81.08	BBBB
ATOM	6029	O	MET	B	294	-11.783	77.409	47.709	1.00	81.59	BBBB
ATOM	6030	N	GLU	B	295	-11.205	77.892	49.823	1.00	82.30	BBBB
ATOM	6031	CA	GLU	B	295	-9.840	78.232	49.429	1.00	83.77	BBBB
ATOM	6032	CB	GLU	B	295	-9.749	79.735	49.140	1.00	84.47	BBBB
ATOM	6033	CG	GLU	B	295	-9.509	80.638	50.347	1.00	86.89	BBBB
ATOM	6034	CD	GLU	B	295	-8.031	80.782	50.696	1.00	88.22	BBBB
ATOM	6035	OE1	GLU	B	295	-7.224	81.050	49.780	1.00	88.93	BBBB
ATOM	6036	OE2	GLU	B	295	-7.672	80.633	51.885	1.00	89.53	BBBB
ATOM	6037	C	GLU	B	295	-8.756	77.839	50.423	1.00	83.78	BBBB
ATOM	6038	O	GLU	B	295	-9.017	77.145	51.401	1.00	83.71	BBBB
ATOM	6039	N	SER	B	296	-7.532	78.283	50.141	1.00	83.75	BBBB
ATOM	6040	CA	SER	B	296	-6.366	78.019	50.980	1.00	83.88	BBBB
ATOM	6041	CB	SER	B	296	-6.213	76.527	51.235	1.00	83.95	BBBB
ATOM	6042	OG	SER	B	296	-5.638	75.900	50.107	1.00	84.71	BBBB
ATOM	6043	C	SER	B	296	-5.120	78.512	50.258	1.00	83.57	BBBB
ATOM	6044	O	SER	B	296	-5.201	78.950	49.117	1.00	84.56	BBBB
ATOM	6045	N	ASP	B	297	-3.976	78.426	50.931	1.00	83.57	BBBB
ATOM	6046	CA	ASP	B	297	-2.678	78.836	50.386	1.00	83.32	BBBB
ATOM	6047	CB	ASP	B	297	-2.023	77.673	49.629	1.00	84.47	BBBB
ATOM	6048	CG	ASP	B	297	-2.099	76.357	50.382	1.00	84.39	BBBB
ATOM	6049	OD1	ASP	B	297	-1.746	76.320	51.579	1.00	84.16	BBBB
ATOM	6050	OD2	ASP	B	297	-2.504	75.350	49.765	1.00	84.42	BBBB
ATOM	6051	C	ASP	B	297	-2.732	80.040	49.448	1.00	83.05	BBBB
ATOM	6052	O	ASP	B	297	-1.826	80.241	48.636	1.00	82.69	BBBB
ATOM	6053	N	GLY	B	298	-3.789	80.838	49.557	1.00	82.29	BBBB
ATOM	6054	CA	GLY	B	298	-3.931	81.996	48.695	1.00	81.24	BBBB
ATOM	6055	C	GLY	B	298	-4.794	81.673	47.494	1.00	79.27	BBBB
ATOM	6056	O	GLY	B	298	-5.369	82.565	46.870	1.00	79.37	BBBB
ATOM	6057	N	ALA	B	299	-4.880	80.385	47.177	1.00	78.48	BBBB
ATOM	6058	CA	ALA	B	299	-5.670	79.912	46.050	1.00	77.23	BBBB
ATOM	6059	CB	ALA	B	299	-5.013	78.691	45.428	1.00	76.62	BBBB
ATOM	6060	C	ALA	B	299	-7.078	79.574	46.507	1.00	76.65	BBBB
ATOM	6061	O	ALA	B	299	-7.415	79.784	47.664	1.00	75.74	BBBB
ATOM	6062	N	ARG	B	300	-7.889	79.045	45.595	1.00	76.38	BBBB
ATOM	6063	CA	ARG	B	300	-9.277	78.687	45.885	1.00	76.34	BBBB
ATOM	6064	CB	ARG	B	300	-10.188	79.827	45.430	1.00	77.24	BBBB
ATOM	6065	CG	ARG	B	300	-11.664	79.609	45.658	1.00	78.99	BBBB
ATOM	6066	CD	ARG	B	300	-12.394	80.916	45.457	1.00	81.05	BBBB
ATOM	6067	NE	ARG	B	300	-11.921	81.930	46.393	1.00	83.46	BBBB
ATOM	6068	CZ	ARG	B	300	-12.297	82.006	47.666	1.00	85.02	BBBB
ATOM	6069	NH1	ARG	B	300	-13.162	81.129	48.154	1.00	85.48	BBBB
ATOM	6070	NH2	ARG	B	300	-11.799	82.951	48.456	1.00	85.46	BBBB

ATOM	6071	C	ARG B 300	-9.652	77.389	45.167	1.00	75.20	BBBB
ATOM	6072	O	ARG B 300	-9.587	77.323	43.947	1.00	76.11	BBBB
ATOM	6073	N	ALA B 301	-10.049	76.364	45.917	1.00	73.40	BBBB
ATOM	6074	CA	ALA B 301	-10.400	75.073	45.327	1.00	71.60	BBBB
ATOM	6075	CB	ALA B 301	-9.391	74.022	45.759	1.00	71.77	BBBB
ATOM	6076	C	ALA B 301	-11.806	74.600	45.665	1.00	70.39	BBBB
ATOM	6077	O	ALA B 301	-12.548	75.290	46.352	1.00	71.22	BBBB
ATOM	6078	N	CYS B 302	-12.153	73.408	45.186	1.00	69.63	BBBB
ATOM	6079	CA	CYS B 302	-13.475	72.817	45.410	1.00	69.81	BBBB
ATOM	6080	C	CYS B 302	-13.463	71.542	46.261	1.00	70.92	BBBB
ATOM	6081	O	CYS B 302	-12.996	70.495	45.818	1.00	70.09	BBBB
ATOM	6082	CB	CYS B 302	-14.121	72.460	44.077	1.00	68.40	BBBB
ATOM	6083	SG	CYS B 302	-14.256	73.797	42.864	1.00	65.62	BBBB
ATOM	6084	N	ALA B 303	-13.995	71.615	47.473	1.00	71.91	BBBB
ATOM	6085	CA	ALA B 303	-14.040	70.438	48.327	1.00	71.37	BBBB
ATOM	6086	CB	ALA B 303	-13.972	70.842	49.796	1.00	73.18	BBBB
ATOM	6087	C	ALA B 303	-15.346	69.714	48.028	1.00	71.30	BBBB
ATOM	6088	O	ALA B 303	-16.337	70.340	47.669	1.00	71.01	BBBB
ATOM	6089	N	ALA B 304	-15.342	68.395	48.160	1.00	71.88	BBBB
ATOM	6090	CA	ALA B 304	-16.532	67.606	47.884	1.00	71.97	BBBB
ATOM	6091	CB	ALA B 304	-16.223	66.127	48.032	1.00	71.72	BBBB
ATOM	6092	C	ALA B 304	-17.662	67.994	48.812	1.00	73.18	BBBB
ATOM	6093	O	ALA B 304	-17.469	68.109	50.024	1.00	72.92	BBBB
ATOM	6094	N	CYS B 305	-18.846	68.195	48.239	1.00	75.22	BBBB
ATOM	6095	CA	CYS B 305	-20.012	68.570	49.025	1.00	75.51	BBBB
ATOM	6096	C	CYS B 305	-20.337	67.431	49.998	1.00	77.37	BBBB
ATOM	6097	O	CYS B 305	-20.571	66.292	49.584	1.00	77.10	BBBB
ATOM	6098	CB	CYS B 305	-21.212	68.846	48.108	1.00	74.53	BBBB
ATOM	6099	SG	CYS B 305	-22.580	69.701	48.956	1.00	76.81	BBBB
ATOM	6100	N	ALA B 306	-20.340	67.742	51.291	1.00	78.67	BBBB
ATOM	6101	CA	ALA B 306	-20.623	66.747	52.314	1.00	79.35	BBBB
ATOM	6102	CB	ALA B 306	-19.727	66.981	53.523	1.00	78.45	BBBB
ATOM	6103	C	ALA B 306	-22.087	66.742	52.741	1.00	77.98	BBBB
ATOM	6104	O	ALA B 306	-22.514	67.578	53.536	1.00	77.53	BBBB
ATOM	6105	N	GLY B 307	-22.845	65.789	52.209	1.00	77.39	BBBB
ATOM	6106	CA	GLY B 307	-24.249	65.674	52.552	1.00	77.35	BBBB
ATOM	6107	C	GLY B 307	-25.027	66.936	52.253	1.00	76.38	BBBB
ATOM	6108	O	GLY B 307	-24.936	67.475	51.152	1.00	77.04	BBBB
ATOM	6109	N	CYS B 309	-26.539	69.823	46.511	1.00	70.90	BBBB
ATOM	6110	CA	CYS B 309	-25.612	70.413	47.468	1.00	70.76	BBBB
ATOM	6111	C	CYS B 309	-26.262	71.632	48.147	1.00	68.92	BBBB
ATOM	6112	O	CYS B 309	-27.456	71.608	48.453	1.00	68.09	BBBB
ATOM	6113	CB	CYS B 309	-24.310	70.801	46.747	1.00	71.77	BBBB
ATOM	6114	SG	CYS B 309	-22.958	71.343	47.841	1.00	72.47	BBBB
ATOM	6115	N	ALA B 310	-25.480	72.687	48.376	1.00	67.37	BBBB
ATOM	6116	CA	ALA B 310	-25.966	73.908	49.023	1.00	64.60	BBBB
ATOM	6117	CB	ALA B 310	-24.803	74.864	49.235	1.00	66.24	BBBB
ATOM	6118	C	ALA B 310	-27.070	74.608	48.236	1.00	62.95	BBBB
ATOM	6119	O	ALA B 310	-27.815	75.414	48.778	1.00	62.35	BBBB
ATOM	6120	N	LYS B 311	-27.152	74.286	46.952	1.00	61.61	BBBB
ATOM	6121	CA	LYS B 311	-28.124	74.845	46.015	1.00	60.10	BBBB
ATOM	6122	CB	LYS B 311	-29.468	75.168	46.672	1.00	59.83	BBBB
ATOM	6123	CG	LYS B 311	-30.533	75.564	45.636	1.00	59.97	BBBB
ATOM	6124	CD	LYS B 311	-31.895	75.830	46.250	1.00	59.88	BBBB
ATOM	6125	CE	LYS B 311	-33.015	75.633	45.233	1.00	58.79	BBBB
ATOM	6126	NZ	LYS B 311	-32.913	76.529	44.050	1.00	59.99	BBBB
ATOM	6127	C	LYS B 311	-27.615	76.097	45.333	1.00	58.80	BBBB
ATOM	6128	O	LYS B 311	-28.041	77.207	45.640	1.00	58.77	BBBB
ATOM	6129	N	VAL B 312	-26.690	75.907	44.406	1.00	57.83	BBBB
ATOM	6130	CA	VAL B 312	-26.149	77.020	43.659	1.00	56.11	BBBB
ATOM	6131	CB	VAL B 312	-24.741	76.696	43.146	1.00	55.53	BBBB
ATOM	6132	CG1	VAL B 312	-24.079	77.949	42.600	1.00	55.22	BBBB
ATOM	6133	CG2	VAL B 312	-23.919	76.105	44.276	1.00	55.51	BBBB
ATOM	6134	C	VAL B 312	-27.119	77.184	42.499	1.00	54.69	BBBB
ATOM	6135	O	VAL B 312	-27.775	76.221	42.111	1.00	54.83	BBBB
ATOM	6136	N	CYS B 313	-27.232	78.396	41.964	1.00	54.15	BBBB
ATOM	6137	CA	CYS B 313	-28.146	78.653	40.855	1.00	52.77	BBBB
ATOM	6138	C	CYS B 313	-27.471	79.328	39.667	1.00	51.87	BBBB
ATOM	6139	O	CYS B 313	-26.643	80.227	39.834	1.00	50.44	BBBB
ATOM	6140	CB	CYS B 313	-29.333	79.496	41.339	1.00	52.69	BBBB
ATOM	6141	SG	CYS B 313	-30.388	78.618	42.543	1.00	54.18	BBBB
ATOM	6142	N	ASN B 314	-27.824	78.873	38.466	1.00	50.56	BBBB
ATOM	6143	CA	ASN B 314	-27.269	79.429	37.243	1.00	49.32	BBBB
ATOM	6144	CB	ASN B 314	-27.718	78.629	36.034	1.00	49.72	BBBB
ATOM	6145	CG	ASN B 314	-27.279	77.196	36.102	1.00	50.43	BBBB

ATOM	6146	OD1	ASN	B	314	-26.137	76.903	36.449	1.00	50.40	BBBB
ATOM	6147	ND2	ASN	B	314	-28.180	76.288	35.762	1.00	51.27	BBBB
ATOM	6148	C	ASN	B	314	-27.728	80.860	37.090	1.00	48.78	BBBB
ATOM	6149	O	ASN	B	314	-28.892	81.182	37.335	1.00	48.82	BBBB
ATOM	6150	N	GLY	B	315	-26.804	81.717	36.678	1.00	48.02	BBBB
ATOM	6151	CA	GLY	B	315	-27.126	83.119	36.522	1.00	46.99	BBBB
ATOM	6152	C	GLY	B	315	-27.292	83.559	35.088	1.00	46.07	BBBB
ATOM	6153	O	GLY	B	315	-26.322	83.613	34.320	1.00	47.13	BBBB
ATOM	6154	N	ILE	B	316	-28.534	83.884	34.747	1.00	43.85	BBBB
ATOM	6155	CA	ILE	B	316	-28.922	84.347	33.424	1.00	42.70	BBBB
ATOM	6156	CB	ILE	B	316	-29.824	85.597	33.556	1.00	40.78	BBBB
ATOM	6157	CG2	ILE	B	316	-30.268	86.079	32.186	1.00	41.04	BBBB
ATOM	6158	CG1	ILE	B	316	-31.023	85.254	34.432	1.00	38.39	BBBB
ATOM	6159	CD1	ILE	B	316	-32.224	86.092	34.184	1.00	35.93	BBBB
ATOM	6160	C	ILE	B	316	-27.796	84.641	32.411	1.00	43.18	BBBB
ATOM	6161	O	ILE	B	316	-26.832	85.357	32.696	1.00	41.87	BBBB
ATOM	6162	N	GLY	B	317	-27.938	84.063	31.223	1.00	43.70	BBBB
ATOM	6163	CA	GLY	B	317	-26.967	84.276	30.170	1.00	45.14	BBBB
ATOM	6164	C	GLY	B	317	-25.994	83.148	29.911	1.00	46.42	BBBB
ATOM	6165	O	GLY	B	317	-26.336	82.117	29.329	1.00	44.14	BBBB
ATOM	6166	N	ILE	B	318	-24.757	83.368	30.336	1.00	48.77	BBBB
ATOM	6167	CA	ILE	B	318	-23.691	82.392	30.154	1.00	50.45	BBBB
ATOM	6168	CB	ILE	B	318	-22.311	83.013	30.529	1.00	50.26	BBBB
ATOM	6169	CG2	ILE	B	318	-21.203	81.988	30.326	0.01	50.38	BBBB
ATOM	6170	CG1	ILE	B	318	-22.050	84.257	29.677	0.01	50.47	BBBB
ATOM	6171	CD1	ILE	B	318	-20.768	84.987	30.029	0.01	50.58	BBBB
ATOM	6172	C	ILE	B	318	-23.948	81.126	30.984	1.00	50.91	BBBB
ATOM	6173	O	ILE	B	318	-23.976	80.021	30.443	1.00	50.70	BBBB
ATOM	6174	N	GLY	B	319	-24.146	81.292	32.290	1.00	51.88	BBBB
ATOM	6175	CA	GLY	B	319	-24.400	80.150	33.150	1.00	52.86	BBBB
ATOM	6176	C	GLY	B	319	-25.374	79.213	32.469	1.00	53.73	BBBB
ATOM	6177	O	GLY	B	319	-25.124	78.014	32.320	1.00	55.27	BBBB
ATOM	6178	N	GLU	B	320	-26.491	79.780	32.036	1.00	53.09	BBBB
ATOM	6179	CA	GLU	B	320	-27.532	79.028	31.356	1.00	51.59	BBBB
ATOM	6180	CB	GLU	B	320	-28.264	78.104	32.341	1.00	51.34	BBBB
ATOM	6181	CG	GLU	B	320	-28.981	76.937	31.681	1.00	50.32	BBBB
ATOM	6182	CD	GLU	B	320	-29.492	77.290	30.297	1.00	50.13	BBBB
ATOM	6183	OE1	GLU	B	320	-28.657	77.418	29.372	1.00	48.84	BBBB
ATOM	6184	OE2	GLU	B	320	-30.723	77.458	30.144	1.00	49.67	BBBB
ATOM	6185	C	GLU	B	320	-28.483	80.089	30.800	1.00	51.14	BBBB
ATOM	6186	O	GLU	B	320	-28.010	81.082	30.237	1.00	51.31	BBBB
ATOM	6187	N	PHE	B	321	-29.799	79.896	30.979	1.00	48.52	BBBB
ATOM	6188	CA	PHE	B	321	-30.823	80.827	30.489	1.00	44.38	BBBB
ATOM	6189	CB	PHE	B	321	-31.238	81.807	31.596	1.00	41.69	BBBB
ATOM	6190	CG	PHE	B	321	-31.579	81.157	32.908	1.00	39.30	BBBB
ATOM	6191	CD1	PHE	B	321	-30.585	80.668	33.740	1.00	39.57	BBBB
ATOM	6192	CD2	PHE	B	321	-32.901	81.049	33.324	1.00	39.59	BBBB
ATOM	6193	CE1	PHE	B	321	-30.908	80.077	34.978	1.00	38.89	BBBB
ATOM	6194	CE2	PHE	B	321	-33.235	80.460	34.559	1.00	37.45	BBBB
ATOM	6195	CZ	PHE	B	321	-32.240	79.976	35.383	1.00	37.04	BBBB
ATOM	6196	C	PHE	B	321	-30.261	81.617	29.300	1.00	43.44	BBBB
ATOM	6197	O	PHE	B	321	-30.490	82.815	29.174	1.00	43.29	BBBB
ATOM	6198	N	LYS	B	322	-29.513	80.920	28.447	1.00	42.88	BBBB
ATOM	6199	CA	LYS	B	322	-28.852	81.481	27.267	1.00	42.37	BBBB
ATOM	6200	CB	LYS	B	322	-29.027	80.521	26.085	1.00	43.15	BBBB
ATOM	6201	CG	LYS	B	322	-28.407	80.999	24.781	0.01	42.81	BBBB
ATOM	6202	CD	LYS	B	322	-26.896	81.120	24.889	0.01	42.93	BBBB
ATOM	6203	CE	LYS	B	322	-26.284	81.553	23.566	0.01	42.94	BBBB
ATOM	6204	NZ	LYS	B	322	-26.596	80.596	22.467	0.01	42.95	BBBB
ATOM	6205	C	LYS	B	322	-29.303	82.878	26.865	1.00	41.02	BBBB
ATOM	6206	O	LYS	B	322	-28.609	83.864	27.104	1.00	40.06	BBBB
ATOM	6207	N	ASP	B	323	-30.469	82.949	26.239	1.00	40.50	BBBB
ATOM	6208	CA	ASP	B	323	-31.024	84.216	25.807	1.00	39.63	BBBB
ATOM	6209	CB	ASP	B	323	-31.415	84.128	24.330	1.00	39.31	BBBB
ATOM	6210	CG	ASP	B	323	-30.241	83.775	23.438	0.01	39.26	BBBB
ATOM	6211	OD1	ASP	B	323	-29.248	84.533	23.433	0.01	39.14	BBBB
ATOM	6212	OD2	ASP	B	323	-30.311	82.740	22.742	0.01	39.17	BBBB
ATOM	6213	C	ASP	B	323	-32.239	84.560	26.677	1.00	38.87	BBBB
ATOM	6214	O	ASP	B	323	-33.313	84.000	26.499	1.00	40.11	BBBB
ATOM	6215	N	SER	B	324	-32.031	85.470	27.629	1.00	36.41	BBBB
ATOM	6216	CA	SER	B	324	-33.049	85.945	28.568	1.00	33.39	BBBB
ATOM	6217	CB	SER	B	324	-33.239	84.958	29.720	1.00	31.65	BBBB
ATOM	6218	OG	SER	B	324	-33.797	83.736	29.294	1.00	27.86	BBBB
ATOM	6219	C	SER	B	324	-32.516	87.263	29.129	1.00	33.82	BBBB
ATOM	6220	O	SER	B	324	-31.644	87.268	29.998	1.00	34.22	BBBB

ATOM	6221	N	LEU	B	325	-33.046	88.375	28.635	1.00	32.45	BBBB
ATOM	6222	CA	LEU	B	325	-32.584	89.691	29.051	1.00	31.40	BBBB
ATOM	6223	CB	LEU	B	325	-33.396	90.756	28.315	1.00	27.98	BBBB
ATOM	6224	CG	LEU	B	325	-33.169	90.698	26.805	1.00	24.69	BBBB
ATOM	6225	CD1	LEU	B	325	-33.929	91.799	26.131	1.00	24.32	BBBB
ATOM	6226	CD2	LEU	B	325	-31.696	90.841	26.507	1.00	24.02	BBBB
ATOM	6227	C	LEU	B	325	-32.539	89.994	30.556	1.00	32.78	BBBB
ATOM	6228	O	LEU	B	325	-31.683	90.761	31.010	1.00	32.35	BBBB
ATOM	6229	N	SER	B	326	-33.431	89.379	31.325	1.00	33.41	BBBB
ATOM	6230	CA	SER	B	326	-33.491	89.614	32.766	1.00	34.34	BBBB
ATOM	6231	CB	SER	B	326	-34.213	90.948	33.026	1.00	33.53	BBBB
ATOM	6232	OG	SER	B	326	-34.685	91.059	34.360	1.00	33.60	BBBB
ATOM	6233	C	SER	B	326	-34.236	88.468	33.464	1.00	36.35	BBBB
ATOM	6234	O	SER	B	326	-34.681	87.516	32.807	1.00	37.25	BBBB
ATOM	6235	N	ILE	B	327	-34.342	88.535	34.790	1.00	35.67	BBBB
ATOM	6236	CA	ILE	B	327	-35.081	87.515	35.506	1.00	36.61	BBBB
ATOM	6237	CB	ILE	B	327	-34.652	87.370	36.967	1.00	35.84	BBBB
ATOM	6238	CG2	ILE	B	327	-35.715	86.612	37.729	1.00	35.55	BBBB
ATOM	6239	CG1	ILE	B	327	-33.339	86.593	37.053	1.00	36.06	BBBB
ATOM	6240	CD1	ILE	B	327	-32.893	86.259	38.475	1.00	35.14	BBBB
ATOM	6241	C	ILE	B	327	-36.502	88.017	35.469	1.00	37.99	BBBB
ATOM	6242	O	ILE	B	327	-36.780	89.099	35.962	1.00	38.06	BBBB
ATOM	6243	N	ASN	B	328	-37.389	87.225	34.876	1.00	40.08	BBBB
ATOM	6244	CA	ASN	B	328	-38.791	87.584	34.733	1.00	41.54	BBBB
ATOM	6245	CB	ASN	B	328	-39.155	87.640	33.246	1.00	41.43	BBBB
ATOM	6246	CG	ASN	B	328	-38.835	86.340	32.506	1.00	44.08	BBBB
ATOM	6247	OD1	ASN	B	328	-39.327	85.268	32.874	1.00	46.44	BBBB
ATOM	6248	ND2	ASN	B	328	-38.012	86.445	31.460	1.00	43.98	BBBB
ATOM	6249	C	ASN	B	328	-39.773	86.660	35.456	1.00	43.76	BBBB
ATOM	6250	O	ASN	B	328	-39.383	85.822	36.274	1.00	43.95	BBBB
ATOM	6251	N	ALA	B	329	-41.053	86.837	35.122	1.00	45.84	BBBB
ATOM	6252	CA	ALA	B	329	-42.176	86.088	35.680	1.00	46.10	BBBB
ATOM	6253	CB	ALA	B	329	-43.452	86.458	34.956	1.00	46.38	BBBB
ATOM	6254	C	ALA	B	329	-41.971	84.601	35.580	1.00	46.98	BBBB
ATOM	6255	O	ALA	B	329	-42.801	83.817	36.030	1.00	48.20	BBBB
ATOM	6256	N	THR	B	330	-40.874	84.208	34.963	1.00	46.89	BBBB
ATOM	6257	CA	THR	B	330	-40.584	82.805	34.831	1.00	47.25	BBBB
ATOM	6258	CB	THR	B	330	-40.210	82.500	33.397	1.00	45.36	BBBB
ATOM	6259	OG1	THR	B	330	-41.147	83.147	32.532	1.00	43.34	BBBB
ATOM	6260	CG2	THR	B	330	-40.269	81.012	33.148	1.00	46.06	BBBB
ATOM	6261	C	THR	B	330	-39.443	82.451	35.787	1.00	49.13	BBBB
ATOM	6262	O	THR	B	330	-39.676	82.028	36.914	1.00	48.65	BBBB
ATOM	6263	N	ASN	B	331	-38.215	82.641	35.328	1.00	50.75	BBBB
ATOM	6264	CA	ASN	B	331	-37.018	82.364	36.110	1.00	52.60	BBBB
ATOM	6265	CB	ASN	B	331	-36.017	83.479	35.874	1.00	52.98	BBBB
ATOM	6266	CG	ASN	B	331	-35.841	83.779	34.421	1.00	52.98	BBBB
ATOM	6267	OD1	ASN	B	331	-36.813	83.934	33.686	1.00	51.88	BBBB
ATOM	6268	ND2	ASN	B	331	-34.597	83.869	33.990	1.00	54.62	BBBB
ATOM	6269	C	ASN	B	331	-37.223	82.194	37.615	1.00	53.93	BBBB
ATOM	6270	O	ASN	B	331	-36.764	81.214	38.193	1.00	54.41	BBBB
ATOM	6271	N	ILE	B	332	-37.885	83.154	38.256	1.00	54.69	BBBB
ATOM	6272	CA	ILE	B	332	-38.111	83.056	39.691	1.00	55.47	BBBB
ATOM	6273	CB	ILE	B	332	-38.988	84.224	40.211	1.00	55.06	BBBB
ATOM	6274	CG2	ILE	B	332	-38.106	85.413	40.573	1.00	53.92	BBBB
ATOM	6275	CG1	ILE	B	332	-40.038	84.607	39.169	1.00	54.95	BBBB
ATOM	6276	CD1	ILE	B	332	-41.135	83.592	38.983	1.00	55.74	BBBB
ATOM	6277	C	ILE	B	332	-38.763	81.715	40.027	1.00	57.18	BBBB
ATOM	6278	O	ILE	B	332	-38.596	81.185	41.128	1.00	57.94	BBBB
ATOM	6279	N	LYS	B	333	-39.493	81.159	39.064	1.00	57.71	BBBB
ATOM	6280	CA	LYS	B	333	-40.147	79.870	39.243	1.00	57.58	BBBB
ATOM	6281	CB	LYS	B	333	-41.103	79.588	38.076	1.00	57.74	BBBB
ATOM	6282	CG	LYS	B	333	-41.860	78.264	38.165	1.00	57.48	BBBB
ATOM	6283	CD	LYS	B	333	-42.754	78.060	36.953	0.01	57.55	BBBB
ATOM	6284	CE	LYS	B	333	-43.472	76.723	37.014	0.01	57.56	BBBB
ATOM	6285	NZ	LYS	B	333	-44.321	76.603	38.231	0.01	57.58	BBBB
ATOM	6286	C	LYS	B	333	-39.040	78.827	39.275	1.00	57.62	BBBB
ATOM	6287	O	LYS	B	333	-39.287	77.628	39.149	1.00	59.01	BBBB
ATOM	6288	N	HIS	B	334	-37.808	79.301	39.430	1.00	56.75	BBBB
ATOM	6289	CA	HIS	B	334	-36.652	78.425	39.482	1.00	56.26	BBBB
ATOM	6290	CB	HIS	B	334	-36.354	77.843	38.087	1.00	56.94	BBBB
ATOM	6291	CG	HIS	B	334	-35.694	76.497	38.125	1.00	59.29	BBBB
ATOM	6292	CD2	HIS	B	334	-34.518	76.064	37.612	1.00	59.60	BBBB
ATOM	6293	ND1	HIS	B	334	-36.240	75.419	38.793	1.00	60.20	BBBB
ATOM	6294	CE1	HIS	B	334	-35.428	74.383	38.692	1.00	60.01	BBBB
ATOM	6295	NE2	HIS	B	334	-34.375	74.747	37.981	1.00	60.38	BBBB

ATOM	6296	C	HIS	B	334	-35.436	79.169	40.038	1.00	55.02	BBBB
ATOM	6297	O	HIS	B	334	-34.328	79.057	39.519	1.00	55.52	BBBB
ATOM	6298	N	PHE	B	335	-35.667	79.935	41.100	1.00	53.34	BBBB
ATOM	6299	CA	PHE	B	335	-34.619	80.693	41.780	1.00	51.56	BBBB
ATOM	6300	CB	PHE	B	335	-34.583	82.156	41.310	1.00	49.79	BBBB
ATOM	6301	CG	PHE	B	335	-33.648	82.404	40.162	1.00	47.88	BBBB
ATOM	6302	CD1	PHE	B	335	-34.055	82.187	38.852	1.00	47.07	BBBB
ATOM	6303	CD2	PHE	B	335	-32.345	82.810	40.393	1.00	46.89	BBBB
ATOM	6304	CE1	PHE	B	335	-33.174	82.368	37.793	1.00	46.15	BBBB
ATOM	6305	CE2	PHE	B	335	-31.459	82.992	39.336	1.00	46.91	BBBB
ATOM	6306	CZ	PHE	B	335	-31.876	82.770	38.037	1.00	45.75	BBBB
ATOM	6307	C	PHE	B	335	-34.936	80.663	43.266	1.00	51.61	BBBB
ATOM	6308	O	PHE	B	335	-34.395	81.447	44.040	1.00	52.18	BBBB
ATOM	6309	N	LYS	B	336	-35.814	79.746	43.659	1.00	51.09	BBBB
ATOM	6310	CA	LYS	B	336	-36.228	79.628	45.052	1.00	49.79	BBBB
ATOM	6311	CB	LYS	B	336	-37.404	78.667	45.165	1.00	50.13	BBBB
ATOM	6312	CG	LYS	B	336	-38.327	78.991	46.310	1.00	50.77	BBBB
ATOM	6313	CD	LYS	B	336	-38.930	80.358	46.104	1.00	52.44	BBBB
ATOM	6314	CE	LYS	B	336	-39.556	80.459	44.717	1.00	53.63	BBBB
ATOM	6315	NZ	LYS	B	336	-40.605	79.413	44.500	1.00	55.18	BBBB
ATOM	6316	C	LYS	B	336	-35.120	79.170	45.989	1.00	48.81	BBBB
ATOM	6317	O	LYS	B	336	-34.319	78.307	45.647	1.00	47.92	BBBB
ATOM	6318	N	ASN	B	337	-35.081	79.764	47.174	1.00	48.40	BBBB
ATOM	6319	CA	ASN	B	337	-34.087	79.417	48.179	1.00	48.48	BBBB
ATOM	6320	CB	ASN	B	337	-34.473	78.092	48.851	1.00	50.55	BBBB
ATOM	6321	CG	ASN	B	337	-35.394	78.278	50.059	1.00	52.07	BBBB
ATOM	6322	OD1	ASN	B	337	-36.016	77.320	50.533	1.00	53.07	BBBB
ATOM	6323	ND2	ASN	B	337	-35.468	79.500	50.570	1.00	52.83	BBBB
ATOM	6324	C	ASN	B	337	-32.641	79.320	47.689	1.00	47.50	BBBB
ATOM	6325	O	ASN	B	337	-31.827	78.678	48.333	1.00	47.18	BBBB
ATOM	6326	N	CYS	B	338	-32.303	79.937	46.565	1.00	47.51	BBBB
ATOM	6327	CA	CYS	B	338	-30.919	79.863	46.098	1.00	48.06	BBBB
ATOM	6328	C	CYS	B	338	-29.999	80.433	47.181	1.00	47.37	BBBB
ATOM	6329	O	CYS	B	338	-30.289	81.485	47.745	1.00	47.74	BBBB
ATOM	6330	CB	CYS	B	338	-30.733	80.658	44.797	1.00	49.63	BBBB
ATOM	6331	SG	CYS	B	338	-31.631	80.023	43.333	1.00	52.83	BBBB
ATOM	6332	N	THR	B	339	-28.906	79.732	47.483	1.00	46.07	BBBB
ATOM	6333	CA	THR	B	339	-27.943	80.186	48.496	1.00	44.56	BBBB
ATOM	6334	CB	THR	B	339	-27.118	78.996	49.064	1.00	45.41	BBBB
ATOM	6335	OG1	THR	B	339	-26.054	79.485	49.891	1.00	45.85	BBBB
ATOM	6336	CG2	THR	B	339	-26.522	78.169	47.935	1.00	47.50	BBBB
ATOM	6337	C	THR	B	339	-26.988	81.213	47.878	1.00	42.95	BBBB
ATOM	6338	O	THR	B	339	-26.803	82.311	48.404	1.00	41.51	BBBB
ATOM	6339	N	SER	B	340	-26.383	80.829	46.760	1.00	41.61	BBBB
ATOM	6340	CA	SER	B	340	-25.472	81.682	46.006	1.00	40.00	BBBB
ATOM	6341	CB	SER	B	340	-24.011	81.249	46.203	1.00	39.63	BBBB
ATOM	6342	OG	SER	B	340	-23.688	80.103	45.424	1.00	36.55	BBBB
ATOM	6343	C	SER	B	340	-25.878	81.410	44.571	1.00	39.38	BBBB
ATOM	6344	O	SER	B	340	-26.553	80.419	44.305	1.00	39.30	BBBB
ATOM	6345	N	ILE	B	341	-25.499	82.280	43.643	1.00	38.79	BBBB
ATOM	6346	CA	ILE	B	341	-25.833	82.020	42.244	1.00	37.29	BBBB
ATOM	6347	CB	ILE	B	341	-26.967	82.980	41.721	1.00	35.46	BBBB
ATOM	6348	CG2	ILE	B	341	-28.218	82.814	42.567	1.00	35.12	BBBB
ATOM	6349	CG1	ILE	B	341	-26.520	84.431	41.741	1.00	33.30	BBBB
ATOM	6350	CD1	ILE	B	341	-26.110	84.895	40.396	1.00	33.99	BBBB
ATOM	6351	C	ILE	B	341	-24.589	82.063	41.341	1.00	36.40	BBBB
ATOM	6352	O	ILE	B	341	-23.852	83.050	41.305	1.00	34.58	BBBB
ATOM	6353	N	SER	B	342	-24.340	80.944	40.664	1.00	35.98	BBBB
ATOM	6354	CA	SER	B	342	-23.213	80.810	39.748	1.00	35.85	BBBB
ATOM	6355	CB	SER	B	342	-22.821	79.338	39.590	1.00	38.14	BBBB
ATOM	6356	OG	SER	B	342	-21.873	79.166	38.550	1.00	40.56	BBBB
ATOM	6357	C	SER	B	342	-23.685	81.364	38.419	1.00	34.19	BBBB
ATOM	6358	O	SER	B	342	-24.448	80.732	37.705	1.00	33.81	BBBB
ATOM	6359	N	GLY	B	343	-23.232	82.559	38.099	1.00	33.29	BBBB
ATOM	6360	CA	GLY	B	343	-23.655	83.199	36.876	1.00	34.01	BBBB
ATOM	6361	C	GLY	B	343	-23.881	84.653	37.214	1.00	34.50	BBBB
ATOM	6362	O	GLY	B	343	-23.410	85.125	38.244	1.00	35.41	BBBB
ATOM	6363	N	ASP	B	344	-24.594	85.372	36.360	1.00	34.63	BBBB
ATOM	6364	CA	ASP	B	344	-24.849	86.779	36.609	1.00	34.13	BBBB
ATOM	6365	CB	ASP	B	344	-24.420	87.607	35.402	1.00	36.08	BBBB
ATOM	6366	CG	ASP	B	344	-23.172	87.052	34.724	1.00	38.86	BBBB
ATOM	6367	OD1	ASP	B	344	-23.233	85.973	34.084	1.00	39.58	BBBB
ATOM	6368	OD2	ASP	B	344	-22.116	87.696	34.831	1.00	40.51	BBBB
ATOM	6369	C	ASP	B	344	-26.333	86.961	36.862	1.00	33.92	BBBB
ATOM	6370	O	ASP	B	344	-27.147	86.110	36.506	1.00	33.59	BBBB

ATOM	6371	N	LEU B 345	-26.687	88.067	37.499	1.00	33.45	BBBB
ATOM	6372	CA	LEU B 345	-28.083	88.354	37.778	1.00	32.48	BBBB
ATOM	6373	CB	LEU B 345	-28.287	88.522	39.274	1.00	31.64	BBBB
ATOM	6374	CG	LEU B 345	-29.442	87.717	39.847	1.00	32.32	BBBB
ATOM	6375	CD1	LEU B 345	-29.323	86.254	39.445	1.00	31.36	BBBB
ATOM	6376	CD2	LEU B 345	-29.431	87.861	41.348	1.00	31.67	BBBB
ATOM	6377	C	LEU B 345	-28.373	89.652	37.052	1.00	32.73	BBBB
ATOM	6378	O	LEU B 345	-27.600	90.602	37.171	1.00	33.94	BBBB
ATOM	6379	N	HIS B 346	-29.456	89.681	36.276	1.00	31.32	BBBB
ATOM	6380	CA	HIS B 346	-29.838	90.873	35.512	1.00	28.92	BBBB
ATOM	6381	CB	HIS B 346	-29.837	90.597	34.012	1.00	28.60	BBBB
ATOM	6382	CG	HIS B 346	-28.494	90.299	33.440	1.00	28.13	BBBB
ATOM	6383	CD2	HIS B 346	-27.337	89.915	34.022	1.00	28.34	BBBB
ATOM	6384	ND1	HIS B 346	-28.237	90.385	32.089	1.00	28.62	BBBB
ATOM	6385	CE1	HIS B 346	-26.976	90.068	31.864	1.00	29.89	BBBB
ATOM	6386	NE2	HIS B 346	-26.407	89.778	33.020	1.00	31.32	BBBB
ATOM	6387	C	HIS B 346	-31.244	91.257	35.875	1.00	27.78	BBBB
ATOM	6388	O	HIS B 346	-32.102	90.397	35.922	1.00	28.95	BBBB
ATOM	6389	N	ILE B 347	-31.494	92.539	36.101	1.00	27.09	BBBB
ATOM	6390	CA	ILE B 347	-32.840	92.997	36.439	1.00	27.34	BBBB
ATOM	6391	CB	ILE B 347	-32.963	93.346	37.947	1.00	26.18	BBBB
ATOM	6392	CG2	ILE B 347	-34.341	93.898	38.244	1.00	25.75	BBBB
ATOM	6393	CG1	ILE B 347	-32.711	92.103	38.797	1.00	25.30	BBBB
ATOM	6394	CD1	ILE B 347	-32.924	92.305	40.271	1.00	24.11	BBBB
ATOM	6395	C	ILE B 347	-33.204	94.242	35.633	1.00	28.70	BBBB
ATOM	6396	O	ILE B 347	-32.880	95.356	36.038	1.00	30.31	BBBB
ATOM	6397	N	LEU B 348	-33.877	94.066	34.499	1.00	28.80	BBBB
ATOM	6398	CA	LEU B 348	-34.265	95.210	33.664	1.00	29.33	BBBB
ATOM	6399	CB	LEU B 348	-33.975	94.900	32.196	1.00	27.88	BBBB
ATOM	6400	CG	LEU B 348	-32.628	94.201	31.968	1.00	27.12	BBBB
ATOM	6401	CD1	LEU B 348	-32.264	94.243	30.489	1.00	27.78	BBBB
ATOM	6402	CD2	LEU B 348	-31.544	94.876	32.782	1.00	25.91	BBBB
ATOM	6403	C	LEU B 348	-35.742	95.555	33.860	1.00	29.92	BBBB
ATOM	6404	O	LEU B 348	-36.466	94.825	34.514	1.00	30.12	BBBB
ATOM	6405	N	PRO B 349	-36.206	96.688	33.318	1.00	31.75	BBBB
ATOM	6406	CD	PRO B 349	-35.480	97.845	32.774	1.00	32.35	BBBB
ATOM	6407	CA	PRO B 349	-37.623	97.012	33.517	1.00	32.64	BBBB
ATOM	6408	CB	PRO B 349	-37.741	98.431	32.962	1.00	31.85	BBBB
ATOM	6409	CG	PRO B 349	-36.574	98.571	32.056	1.00	32.06	BBBB
ATOM	6410	C	PRO B 349	-38.597	96.041	32.883	1.00	33.16	BBBB
ATOM	6411	O	PRO B 349	-39.765	95.974	33.243	1.00	32.32	BBBB
ATOM	6412	N	VAL B 350	-38.104	95.268	31.940	1.00	35.77	BBBB
ATOM	6413	CA	VAL B 350	-38.947	94.295	31.282	1.00	39.21	BBBB
ATOM	6414	CB	VAL B 350	-38.131	93.531	30.250	1.00	39.69	BBBB
ATOM	6415	CG1	VAL B 350	-39.031	92.691	29.389	1.00	40.98	BBBB
ATOM	6416	CG2	VAL B 350	-37.335	94.520	29.420	1.00	41.00	BBBB
ATOM	6417	C	VAL B 350	-39.483	93.336	32.336	1.00	40.08	BBBB
ATOM	6418	O	VAL B 350	-40.610	92.867	32.258	1.00	40.81	BBBB
ATOM	6419	N	ALA B 351	-38.659	93.076	33.337	1.00	42.01	BBBB
ATOM	6420	CA	ALA B 351	-39.003	92.173	34.419	1.00	44.91	BBBB
ATOM	6421	CB	ALA B 351	-37.763	91.881	35.259	1.00	43.68	BBBB
ATOM	6422	C	ALA B 351	-40.113	92.697	35.313	1.00	47.44	BBBB
ATOM	6423	O	ALA B 351	-40.480	92.050	36.289	1.00	48.68	BBBB
ATOM	6424	N	PHE B 352	-40.657	93.861	34.996	1.00	49.63	BBBB
ATOM	6425	CA	PHE B 352	-41.711	94.401	35.838	1.00	52.66	BBBB
ATOM	6426	CB	PHE B 352	-41.164	95.562	36.656	1.00	52.83	BBBB
ATOM	6427	CG	PHE B 352	-40.240	95.141	37.741	1.00	52.84	BBBB
ATOM	6428	CD1	PHE B 352	-39.143	95.922	38.074	1.00	53.95	BBBB
ATOM	6429	CD2	PHE B 352	-40.471	93.972	38.445	1.00	53.12	BBBB
ATOM	6430	CE1	PHE B 352	-38.282	95.546	39.096	1.00	54.39	BBBB
ATOM	6431	CE2	PHE B 352	-39.617	93.585	39.471	1.00	55.12	BBBB
ATOM	6432	CZ	PHE B 352	-38.518	94.375	39.797	1.00	55.09	BBBB
ATOM	6433	C	PHE B 352	-42.936	94.848	35.066	1.00	54.66	BBBB
ATOM	6434	O	PHE B 352	-44.041	94.897	35.620	1.00	55.20	BBBB
ATOM	6435	N	ARG B 353	-42.733	95.181	33.793	1.00	55.53	BBBB
ATOM	6436	CA	ARG B 353	-43.820	95.626	32.936	1.00	56.97	BBBB
ATOM	6437	CB	ARG B 353	-43.401	96.847	32.120	1.00	58.74	BBBB
ATOM	6438	CG	ARG B 353	-42.443	96.528	30.977	1.00	61.31	BBBB
ATOM	6439	CD	ARG B 353	-43.071	96.800	29.614	1.00	61.92	BBBB
ATOM	6440	NE	ARG B 353	-43.323	98.223	29.393	1.00	63.75	BBBB
ATOM	6441	CZ	ARG B 353	-42.378	99.161	29.341	1.00	64.99	BBBB
ATOM	6442	NH1	ARG B 353	-41.097	98.841	29.493	1.00	64.35	BBBB
ATOM	6443	NH2	ARG B 353	-42.716	100.428	29.132	1.00	65.92	BBBB
ATOM	6444	C	ARG B 353	-44.146	94.487	31.997	1.00	57.33	BBBB
ATOM	6445	O	ARG B 353	-45.220	94.449	31.397	1.00	58.35	BBBB

ATOM	6446	N	GLY B 354	-43.200	93.563	31.863	1.00	56.83	BBBB
ATOM	6447	CA	GLY B 354	-43.407	92.421	30.998	1.00	56.67	BBBB
ATOM	6448	C	GLY B 354	-43.133	92.702	29.536	1.00	56.70	BBBB
ATOM	6449	O	GLY B 354	-43.392	93.797	29.032	1.00	57.16	BBBB
ATOM	6450	N	ASP B 355	-42.603	91.692	28.857	1.00	56.56	BBBB
ATOM	6451	CA	ASP B 355	-42.270	91.767	27.442	1.00	56.39	BBBB
ATOM	6452	CB	ASP B 355	-40.884	91.160	27.206	1.00	58.47	BBBB
ATOM	6453	CG	ASP B 355	-40.455	91.218	25.757	1.00	60.05	BBBB
ATOM	6454	OD1	ASP B 355	-41.258	90.846	24.875	1.00	60.82	BBBB
ATOM	6455	OD2	ASP B 355	-39.303	91.625	25.500	1.00	61.71	BBBB
ATOM	6456	C	ASP B 355	-43.310	90.931	26.725	1.00	55.78	BBBB
ATOM	6457	O	ASP B 355	-43.720	89.898	27.241	1.00	55.64	BBBB
ATOM	6458	N	SER B 356	-43.738	91.364	25.545	1.00	55.06	BBBB
ATOM	6459	CA	SER B 356	-44.731	90.601	24.807	1.00	54.22	BBBB
ATOM	6460	CB	SER B 356	-45.805	91.513	24.227	1.00	55.13	BBBB
ATOM	6461	OG	SER B 356	-46.863	90.734	23.686	1.00	56.65	BBBB
ATOM	6462	C	SER B 356	-44.094	89.803	23.690	1.00	53.19	BBBB
ATOM	6463	O	SER B 356	-44.621	88.775	23.280	1.00	53.00	BBBB
ATOM	6464	N	PHE B 357	-42.965	90.279	23.187	1.00	52.15	BBBB
ATOM	6465	CA	PHE B 357	-42.284	89.564	22.120	1.00	51.45	BBBB
ATOM	6466	CB	PHE B 357	-41.190	90.422	21.497	1.00	50.63	BBBB
ATOM	6467	CG	PHE B 357	-40.396	89.704	20.451	1.00	50.42	BBBB
ATOM	6468	CD1	PHE B 357	-40.969	89.386	19.226	1.00	49.99	BBBB
ATOM	6469	CD2	PHE B 357	-39.086	89.311	20.703	1.00	50.80	BBBB
ATOM	6470	CE1	PHE B 357	-40.254	88.687	18.268	1.00	51.16	BBBB
ATOM	6471	CE2	PHE B 357	-38.357	88.610	19.751	1.00	51.15	BBBB
ATOM	6472	CZ	PHE B 357	-38.942	88.296	18.530	1.00	51.77	BBBB
ATOM	6473	C	PHE B 357	-41.659	88.294	22.684	1.00	50.81	BBBB
ATOM	6474	O	PHE B 357	-41.112	87.476	21.952	1.00	51.06	BBBB
ATOM	6475	N	THR B 358	-41.730	88.137	23.996	1.00	49.66	BBBB
ATOM	6476	CA	THR B 358	-41.165	86.959	24.617	1.00	49.23	BBBB
ATOM	6477	CB	THR B 358	-40.180	87.330	25.758	1.00	49.67	BBBB
ATOM	6478	OG1	THR B 358	-39.295	88.368	25.323	1.00	50.24	BBBB
ATOM	6479	CG2	THR B 358	-39.340	86.140	26.121	1.00	49.18	BBBB
ATOM	6480	C	THR B 358	-42.322	86.163	25.185	1.00	48.68	BBBB
ATOM	6481	O	THR B 358	-42.135	85.265	25.999	1.00	49.07	BBBB
ATOM	6482	N	HIS B 359	-43.531	86.500	24.754	1.00	48.13	BBBB
ATOM	6483	CA	HIS B 359	-44.707	85.802	25.239	1.00	47.15	BBBB
ATOM	6484	CB	HIS B 359	-44.779	84.417	24.571	1.00	49.21	BBBB
ATOM	6485	CG	HIS B 359	-44.512	84.429	23.085	1.00	52.77	BBBB
ATOM	6486	CD2	HIS B 359	-43.397	84.116	22.376	1.00	52.88	BBBB
ATOM	6487	ND1	HIS B 359	-45.462	84.792	22.149	1.00	54.36	BBBB
ATOM	6488	CE1	HIS B 359	-44.947	84.701	20.934	1.00	54.33	BBBB
ATOM	6489	NE2	HIS B 359	-43.694	84.292	21.043	1.00	53.18	BBBB
ATOM	6490	C	HIS B 359	-44.481	85.685	26.757	1.00	45.99	BBBB
ATOM	6491	O	HIS B 359	-44.719	84.641	27.355	1.00	46.35	BBBB
ATOM	6492	N	THR B 360	-44.013	86.781	27.361	1.00	44.51	BBBB
ATOM	6493	CA	THR B 360	-43.686	86.855	28.789	1.00	41.93	BBBB
ATOM	6494	CB	THR B 360	-42.217	87.245	28.980	1.00	42.07	BBBB
ATOM	6495	OG1	THR B 360	-41.373	86.241	28.407	1.00	42.84	BBBB
ATOM	6496	CG2	THR B 360	-41.898	87.411	30.460	1.00	40.49	BBBB
ATOM	6497	C	THR B 360	-44.486	87.815	29.667	1.00	41.37	BBBB
ATOM	6498	O	THR B 360	-44.549	89.013	29.398	1.00	40.83	BBBB
ATOM	6499	N	PRO B 361	-45.079	87.297	30.756	1.00	41.18	BBBB
ATOM	6500	CD	PRO B 361	-45.286	85.849	30.915	1.00	40.72	BBBB
ATOM	6501	CA	PRO B 361	-45.886	88.034	31.740	1.00	40.52	BBBB
ATOM	6502	CB	PRO B 361	-46.498	86.925	32.585	1.00	39.78	BBBB
ATOM	6503	CG	PRO B 361	-46.609	85.797	31.628	1.00	40.89	BBBB
ATOM	6504	C	PRO B 361	-45.068	88.982	32.613	1.00	41.08	BBBB
ATOM	6505	O	PRO B 361	-43.839	88.903	32.651	1.00	40.51	BBBB
ATOM	6506	N	PRO B 362	-45.747	89.893	33.329	1.00	42.07	BBBB
ATOM	6507	CD	PRO B 362	-47.178	90.217	33.215	1.00	43.39	BBBB
ATOM	6508	CA	PRO B 362	-45.075	90.850	34.211	1.00	42.38	BBBB
ATOM	6509	CB	PRO B 362	-46.182	91.847	34.554	1.00	42.21	BBBB
ATOM	6510	CG	PRO B 362	-47.419	91.027	34.462	1.00	43.36	BBBB
ATOM	6511	C	PRO B 362	-44.499	90.141	35.429	1.00	42.17	BBBB
ATOM	6512	O	PRO B 362	-43.891	89.094	35.287	1.00	42.14	BBBB
ATOM	6513	N	LEU B 363	-44.677	90.690	36.621	1.00	42.61	BBBB
ATOM	6514	CA	LEU B 363	-44.125	90.039	37.802	1.00	44.33	BBBB
ATOM	6515	CB	LEU B 363	-42.658	90.457	37.978	1.00	43.15	BBBB
ATOM	6516	CG	LEU B 363	-41.575	89.394	38.223	1.00	43.09	BBBB
ATOM	6517	CD1	LEU B 363	-40.213	90.075	38.285	1.00	42.46	BBBB
ATOM	6518	CD2	LEU B 363	-41.824	88.644	39.511	1.00	41.14	BBBB
ATOM	6519	C	LEU B 363	-44.915	90.312	39.092	1.00	45.94	BBBB
ATOM	6520	O	LEU B 363	-46.123	90.104	39.157	1.00	47.46	BBBB

ATOM	6521	N	ASP	B	364	-44.222	90.772	40.122	1.00	47.39	BBBB
ATOM	6522	CA	ASP	B	364	-44.843	91.047	41.406	1.00	49.17	BBBB
ATOM	6523	CB	ASP	B	364	-45.450	89.767	41.986	1.00	51.17	BBBB
ATOM	6524	CG	ASP	B	364	-46.224	90.004	43.279	1.00	52.46	BBBB
ATOM	6525	OD1	ASP	B	364	-45.719	90.730	44.170	1.00	53.72	BBBB
ATOM	6526	OD2	ASP	B	364	-47.336	89.443	43.406	1.00	51.97	BBBB
ATOM	6527	C	ASP	B	364	-43.680	91.496	42.261	1.00	50.11	BBBB
ATOM	6528	O	ASP	B	364	-42.895	90.684	42.735	1.00	49.11	BBBB
ATOM	6529	N	PRO	B	365	-43.555	92.806	42.463	1.00	51.29	BBBB
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ATOM	6531	CA	PRO	B	365	-42.473	93.374	43.260	1.00	52.10	BBBB
ATOM	6532	CB	PRO	B	365	-43.049	94.710	43.691	1.00	53.12	BBBB
ATOM	6533	CG	PRO	B	365	-43.843	95.102	42.476	1.00	52.79	BBBB
ATOM	6534	C	PRO	B	365	-42.021	92.508	44.427	1.00	52.44	BBBB
ATOM	6535	O	PRO	B	365	-40.821	92.359	44.649	1.00	52.61	BBBB
ATOM	6536	N	GLN	B	366	-42.964	91.931	45.169	1.00	53.29	BBBB
ATOM	6537	CA	GLN	B	366	-42.581	91.081	46.295	1.00	54.32	BBBB
ATOM	6538	CB	GLN	B	366	-43.790	90.646	47.127	1.00	54.37	BBBB
ATOM	6539	CG	GLN	B	366	-43.366	89.771	48.302	1.00	56.94	BBBB
ATOM	6540	CD	GLN	B	366	-44.521	89.268	49.162	1.00	58.98	BBBB
ATOM	6541	OE1	GLN	B	366	-45.358	90.048	49.625	1.00	59.81	BBBB
ATOM	6542	NE2	GLN	B	366	-44.555	87.958	49.396	1.00	58.67	BBBB
ATOM	6543	C	GLN	B	366	-41.887	89.840	45.764	1.00	54.08	BBBB
ATOM	6544	O	GLN	B	366	-40.849	89.423	46.276	1.00	54.71	BBBB
ATOM	6545	N	GLU	B	367	-42.474	89.262	44.725	1.00	53.57	BBBB
ATOM	6546	CA	GLU	B	367	-41.955	88.064	44.088	1.00	53.03	BBBB
ATOM	6547	CB	GLU	B	367	-42.577	87.930	42.690	1.00	55.49	BBBB
ATOM	6548	CG	GLU	B	367	-42.655	86.505	42.156	1.00	60.15	BBBB
ATOM	6549	CD	GLU	B	367	-43.425	86.402	40.843	1.00	62.85	BBBB
ATOM	6550	OE1	GLU	B	367	-44.627	86.752	40.814	1.00	62.84	BBBB
ATOM	6551	OE2	GLU	B	367	-42.822	85.966	39.837	1.00	65.22	BBBB
ATOM	6552	C	GLU	B	367	-40.428	88.080	43.993	1.00	51.01	BBBB
ATOM	6553	O	GLU	B	367	-39.790	87.030	43.999	1.00	50.24	BBBB
ATOM	6554	N	LEU	B	368	-39.847	89.273	43.928	1.00	49.14	BBBB
ATOM	6555	CA	LEU	B	368	-38.400	89.411	43.814	1.00	48.22	BBBB
ATOM	6556	CB	LEU	B	368	-38.058	90.698	43.052	1.00	47.13	BBBB
ATOM	6557	CG	LEU	B	368	-36.871	90.663	42.075	1.00	46.22	BBBB
ATOM	6558	CD1	LEU	B	368	-35.591	91.134	42.746	1.00	45.00	BBBB
ATOM	6559	CD2	LEU	B	368	-36.723	89.250	41.523	1.00	45.34	BBBB
ATOM	6560	C	LEU	B	368	-37.665	89.380	45.155	1.00	48.47	BBBB
ATOM	6561	O	LEU	B	368	-36.570	89.927	45.286	1.00	48.52	BBBB
ATOM	6562	N	ASP	B	369	-38.274	88.751	46.154	1.00	48.02	BBBB
ATOM	6563	CA	ASP	B	369	-37.649	88.620	47.463	1.00	47.49	BBBB
ATOM	6564	CB	ASP	B	369	-38.681	88.776	48.563	1.00	48.63	BBBB
ATOM	6565	CG	ASP	B	369	-39.030	90.214	48.809	1.00	50.90	BBBB
ATOM	6566	OD1	ASP	B	369	-38.167	90.928	49.354	1.00	51.96	BBBB
ATOM	6567	OD2	ASP	B	369	-40.151	90.635	48.450	1.00	51.44	BBBB
ATOM	6568	C	ASP	B	369	-37.028	87.239	47.514	1.00	47.18	BBBB
ATOM	6569	O	ASP	B	369	-36.272	86.904	48.417	1.00	46.76	BBBB
ATOM	6570	N	ILE	B	370	-37.364	86.438	46.513	1.00	46.08	BBBB
ATOM	6571	CA	ILE	B	370	-36.841	85.100	46.390	1.00	44.33	BBBB
ATOM	6572	CB	ILE	B	370	-37.180	84.545	45.014	1.00	44.66	BBBB
ATOM	6573	CG2	ILE	B	370	-36.519	83.199	44.814	1.00	45.04	BBBB
ATOM	6574	CG1	ILE	B	370	-38.702	84.471	44.870	1.00	45.30	BBBB
ATOM	6575	CD1	ILE	B	370	-39.201	84.190	43.469	1.00	44.16	BBBB
ATOM	6576	C	ILE	B	370	-35.341	85.238	46.535	1.00	44.15	BBBB
ATOM	6577	O	ILE	B	370	-34.666	84.354	47.055	1.00	46.18	BBBB
ATOM	6578	N	LEU	B	371	-34.825	86.374	46.088	1.00	42.97	BBBB
ATOM	6579	CA	LEU	B	371	-33.397	86.640	46.157	1.00	41.06	BBBB
ATOM	6580	CB	LEU	B	371	-33.038	87.858	45.297	1.00	39.49	BBBB
ATOM	6581	CG	LEU	B	371	-32.923	87.716	43.774	1.00	38.64	BBBB
ATOM	6582	CD1	LEU	B	371	-34.207	87.176	43.170	1.00	38.53	BBBB
ATOM	6583	CD2	LEU	B	371	-32.613	89.069	43.190	1.00	37.33	BBBB
ATOM	6584	C	LEU	B	371	-32.920	86.877	47.575	1.00	40.15	BBBB
ATOM	6585	O	LEU	B	371	-31.727	86.777	47.843	1.00	39.93	BBBB
ATOM	6586	N	LYS	B	372	-33.853	87.173	48.477	1.00	39.59	BBBB
ATOM	6587	CA	LYS	B	372	-33.535	87.468	49.881	1.00	40.17	BBBB
ATOM	6588	CB	LYS	B	372	-34.806	87.449	50.747	1.00	40.88	BBBB
ATOM	6589	CG	LYS	B	372	-35.744	88.643	50.555	1.00	40.72	BBBB
ATOM	6590	CD	LYS	B	372	-36.115	89.282	51.885	1.00	40.02	BBBB
ATOM	6591	CE	LYS	B	372	-34.869	89.718	52.644	1.00	39.28	BBBB
ATOM	6592	NZ	LYS	B	372	-35.199	90.555	53.826	1.00	39.65	BBBB
ATOM	6593	C	LYS	B	372	-32.462	86.644	50.603	1.00	39.31	BBBB
ATOM	6594	O	LYS	B	372	-31.865	87.140	51.552	1.00	40.48	BBBB
ATOM	6595	N	THR	B	373	-32.206	85.409	50.181	1.00	37.60	BBBB

ATOM	6596	CA	THR	B	373	-31.195	84.598	50.862	1.00	34.68	BBBB
ATOM	6597	CB	THR	B	373	-31.777	83.242	51.305	1.00	33.43	BBBB
ATOM	6598	OG1	THR	B	373	-30.745	82.447	51.904	1.00	31.44	BBBB
ATOM	6599	CG2	THR	B	373	-32.383	82.521	50.124	1.00	32.61	BBBB
ATOM	6600	C	THR	B	373	-29.928	84.334	50.055	1.00	34.35	BBBB
ATOM	6601	O	THR	B	373	-29.273	83.307	50.237	1.00	34.49	BBBB
ATOM	6602	N	VAL	B	374	-29.578	85.252	49.160	1.00	32.93	BBBB
ATOM	6603	CA	VAL	B	374	-28.372	85.084	48.364	1.00	32.39	BBBB
ATOM	6604	CB	VAL	B	374	-28.538	85.652	46.929	1.00	31.65	BBBB
ATOM	6605	CG1	VAL	B	374	-27.222	85.578	46.183	1.00	30.92	BBBB
ATOM	6606	CG2	VAL	B	374	-29.580	84.872	46.175	1.00	30.16	BBBB
ATOM	6607	C	VAL	B	374	-27.252	85.823	49.077	1.00	32.27	BBBB
ATOM	6608	O	VAL	B	374	-27.394	86.989	49.409	1.00	31.83	BBBB
ATOM	6609	N	LYS	B	375	-26.144	85.131	49.321	1.00	33.40	BBBB
ATOM	6610	CA	LYS	B	375	-25.003	85.725	50.005	1.00	33.33	BBBB
ATOM	6611	CB	LYS	B	375	-24.539	84.831	51.165	1.00	34.42	BBBB
ATOM	6612	CG	LYS	B	375	-25.582	84.592	52.263	1.00	33.74	BBBB
ATOM	6613	CD	LYS	B	375	-26.667	83.611	51.829	1.00	32.93	BBBB
ATOM	6614	CE	LYS	B	375	-26.114	82.211	51.625	0.01	33.09	BBBB
ATOM	6615	NZ	LYS	B	375	-27.202	81.244	51.312	0.01	32.83	BBBB
ATOM	6616	C	LYS	B	375	-23.851	85.936	49.043	1.00	33.00	BBBB
ATOM	6617	O	LYS	B	375	-22.979	86.758	49.295	1.00	32.82	BBBB
ATOM	6618	N	GLU	B	376	-23.846	85.185	47.945	1.00	33.40	BBBB
ATOM	6619	CA	GLU	B	376	-22.790	85.314	46.940	1.00	34.43	BBBB
ATOM	6620	CB	GLU	B	376	-21.655	84.319	47.220	1.00	33.55	BBBB
ATOM	6621	CG	GLU	B	376	-20.515	84.370	46.215	0.01	33.57	BBBB
ATOM	6622	CD	GLU	B	376	-19.450	83.329	46.495	0.01	33.41	BBBB
ATOM	6623	OE1	GLU	B	376	-19.774	82.123	46.471	0.01	33.30	BBBB
ATOM	6624	OE2	GLU	B	376	-18.289	83.716	46.740	0.01	33.29	BBBB
ATOM	6625	C	GLU	B	376	-23.264	85.146	45.486	1.00	34.90	BBBB
ATOM	6626	O	GLU	B	376	-24.081	84.275	45.163	1.00	34.20	BBBB
ATOM	6627	N	ILE	B	377	-22.732	86.010	44.625	1.00	35.06	BBBB
ATOM	6628	CA	ILE	B	377	-23.017	86.009	43.195	1.00	34.83	BBBB
ATOM	6629	CB	ILE	B	377	-23.733	87.315	42.755	1.00	35.18	BBBB
ATOM	6630	CG2	ILE	B	377	-23.849	87.378	41.249	1.00	33.96	BBBB
ATOM	6631	CG1	ILE	B	377	-25.138	87.363	43.342	1.00	35.70	BBBB
ATOM	6632	CD1	ILE	B	377	-25.830	88.673	43.092	1.00	36.56	BBBB
ATOM	6633	C	ILE	B	377	-21.660	85.907	42.497	1.00	34.90	BBBB
ATOM	6634	O	ILE	B	377	-20.839	86.824	42.575	1.00	33.54	BBBB
ATOM	6635	N	THR	B	378	-21.436	84.775	41.831	1.00	35.70	BBBB
ATOM	6636	CA	THR	B	378	-20.188	84.504	41.122	1.00	35.91	BBBB
ATOM	6637	CB	THR	B	378	-20.190	83.083	40.516	1.00	37.88	BBBB
ATOM	6638	OG1	THR	B	378	-21.237	82.973	39.543	1.00	39.67	BBBB
ATOM	6639	CG2	THR	B	378	-20.417	82.046	41.597	1.00	38.56	BBBB
ATOM	6640	C	THR	B	378	-19.926	85.498	40.004	1.00	34.19	BBBB
ATOM	6641	O	THR	B	378	-18.802	85.953	39.823	1.00	33.50	BBBB
ATOM	6642	N	GLY	B	379	-20.966	85.830	39.252	1.00	33.65	BBBB
ATOM	6643	CA	GLY	B	379	-20.806	86.773	38.160	1.00	34.91	BBBB
ATOM	6644	C	GLY	B	379	-20.874	88.241	38.555	1.00	35.00	BBBB
ATOM	6645	O	GLY	B	379	-20.083	88.730	39.376	1.00	35.52	BBBB
ATOM	6646	N	PHE	B	380	-21.820	88.955	37.959	1.00	33.14	BBBB
ATOM	6647	CA	PHE	B	380	-21.973	90.361	38.255	1.00	31.35	BBBB
ATOM	6648	CB	PHE	B	380	-21.439	91.216	37.080	1.00	32.11	BBBB
ATOM	6649	CG	PHE	B	380	-22.220	91.082	35.778	1.00	32.55	BBBB
ATOM	6650	CD1	PHE	B	380	-23.535	91.529	35.670	1.00	32.68	BBBB
ATOM	6651	CD2	PHE	B	380	-21.616	90.567	34.644	1.00	32.11	BBBB
ATOM	6652	CE1	PHE	B	380	-24.223	91.467	34.460	1.00	30.70	BBBB
ATOM	6653	CE2	PHE	B	380	-22.305	90.507	33.435	1.00	31.63	BBBB
ATOM	6654	CZ	PHE	B	380	-23.608	90.958	33.349	1.00	30.27	BBBB
ATOM	6655	C	PHE	B	380	-23.424	90.694	38.576	1.00	30.56	BBBB
ATOM	6656	O	PHE	B	380	-24.325	89.879	38.341	1.00	30.65	BBBB
ATOM	6657	N	LEU	B	381	-23.633	91.879	39.144	1.00	28.35	BBBB
ATOM	6658	CA	LEU	B	381	-24.960	92.359	39.494	1.00	26.07	BBBB
ATOM	6659	CB	LEU	B	381	-25.030	92.660	40.994	1.00	25.24	BBBB
ATOM	6660	CG	LEU	B	381	-26.269	93.412	41.514	1.00	26.85	BBBB
ATOM	6661	CD1	LEU	B	381	-27.526	92.587	41.270	1.00	27.17	BBBB
ATOM	6662	CD2	LEU	B	381	-26.114	93.731	42.998	1.00	23.04	BBBB
ATOM	6663	C	LEU	B	381	-25.213	93.632	38.692	1.00	24.88	BBBB
ATOM	6664	O	LEU	B	381	-24.467	94.591	38.804	1.00	25.16	BBBB
ATOM	6665	N	LEU	B	382	-26.254	93.627	37.871	1.00	24.12	BBBB
ATOM	6666	CA	LEU	B	382	-26.615	94.780	37.054	1.00	22.52	BBBB
ATOM	6667	CB	LEU	B	382	-26.386	94.481	35.580	1.00	22.74	BBBB
ATOM	6668	CG	LEU	B	382	-26.611	95.535	34.488	1.00	23.37	BBBB
ATOM	6669	CD1	LEU	B	382	-26.581	94.819	33.152	1.00	21.75	BBBB
ATOM	6670	CD2	LEU	B	382	-27.941	96.242	34.628	1.00	23.67	BBBB

ATOM	6671	C	LEU	B	382	-28.084	95.000	37.256	1.00	21.98	BBBB
ATOM	6672	O	LEU	B	382	-28.878	94.143	36.890	1.00	22.28	BBBB
ATOM	6673	N	ILE	B	383	-28.453	96.135	37.837	1.00	21.77	BBBB
ATOM	6674	CA	ILE	B	383	-29.867	96.450	38.063	1.00	22.66	BBBB
ATOM	6675	CB	ILE	B	383	-30.218	96.610	39.557	1.00	21.49	BBBB
ATOM	6676	CG2	ILE	B	383	-31.614	97.214	39.697	1.00	21.52	BBBB
ATOM	6677	CG1	ILE	B	383	-30.142	95.267	40.266	1.00	18.19	BBBB
ATOM	6678	CD1	ILE	B	383	-30.592	95.342	41.685	1.00	18.00	BBBB
ATOM	6679	C	ILE	B	383	-30.196	97.759	37.389	1.00	22.92	BBBB
ATOM	6680	O	ILE	B	383	-29.497	98.743	37.602	1.00	22.60	BBBB
ATOM	6681	N	GLN	B	384	-31.265	97.757	36.591	1.00	24.72	BBBB
ATOM	6682	CA	GLN	B	384	-31.707	98.936	35.851	1.00	26.23	BBBB
ATOM	6683	CB	GLN	B	384	-31.620	98.691	34.346	1.00	27.06	BBBB
ATOM	6684	CG	GLN	B	384	-30.212	98.464	33.832	1.00	28.43	BBBB
ATOM	6685	CD	GLN	B	384	-30.167	98.347	32.333	1.00	29.92	BBBB
ATOM	6686	OE1	GLN	B	384	-29.099	98.397	31.722	1.00	31.49	BBBB
ATOM	6687	NE2	GLN	B	384	-31.333	98.189	31.723	1.00	31.37	BBBB
ATOM	6688	C	GLN	B	384	-33.120	99.325	36.193	1.00	26.94	BBBB
ATOM	6689	O	GLN	B	384	-33.571	100.394	35.811	1.00	27.79	BBBB
ATOM	6690	N	ALA	B	385	-33.822	98.444	36.895	1.00	28.40	BBBB
ATOM	6691	CA	ALA	B	385	-35.192	98.702	37.323	1.00	30.26	BBBB
ATOM	6692	CB	ALA	B	385	-36.168	98.252	36.261	1.00	29.44	BBBB
ATOM	6693	C	ALA	B	385	-35.462	97.969	38.631	1.00	31.84	BBBB
ATOM	6694	O	ALA	B	385	-34.999	96.852	38.822	1.00	34.18	BBBB
ATOM	6695	N	TRP	B	386	-36.205	98.601	39.530	1.00	32.75	BBBB
ATOM	6696	CA	TRP	B	386	-36.534	98.017	40.828	1.00	34.53	BBBB
ATOM	6697	CB	TRP	B	386	-35.765	98.744	41.926	1.00	34.73	BBBB
ATOM	6698	CG	TRP	B	386	-35.413	97.918	43.103	1.00	35.48	BBBB
ATOM	6699	CD2	TRP	B	386	-34.977	96.553	43.108	1.00	36.61	BBBB
ATOM	6700	CE2	TRP	B	386	-34.721	96.204	44.451	1.00	36.33	BBBB
ATOM	6701	CE3	TRP	B	386	-34.777	95.592	42.113	1.00	37.11	BBBB
ATOM	6702	CD1	TRP	B	386	-35.403	98.325	44.395	1.00	36.05	BBBB
ATOM	6703	NE1	TRP	B	386	-34.989	97.305	45.215	1.00	37.41	BBBB
ATOM	6704	CZ2	TRP	B	386	-34.277	94.935	44.828	1.00	35.78	BBBB
ATOM	6705	CZ3	TRP	B	386	-34.335	94.325	42.487	1.00	37.74	BBBB
ATOM	6706	CH2	TRP	B	386	-34.091	94.010	43.836	1.00	36.74	BBBB
ATOM	6707	C	TRP	B	386	-38.028	98.227	41.027	1.00	36.90	BBBB
ATOM	6708	O	TRP	B	386	-38.651	98.987	40.283	1.00	38.05	BBBB
ATOM	6709	N	PRO	B	387	-38.634	97.563	42.027	1.00	38.30	BBBB
ATOM	6710	CD	PRO	B	387	-38.184	96.361	42.752	1.00	37.15	BBBB
ATOM	6711	CA	PRO	B	387	-40.080	97.768	42.213	1.00	38.62	BBBB
ATOM	6712	CB	PRO	B	387	-40.446	96.695	43.236	1.00	37.79	BBBB
ATOM	6713	CG	PRO	B	387	-39.473	95.597	42.926	1.00	36.94	BBBB
ATOM	6714	C	PRO	B	387	-40.523	99.182	42.649	1.00	39.55	BBBB
ATOM	6715	O	PRO	B	387	-39.744	99.979	43.189	1.00	39.67	BBBB
ATOM	6716	N	ARG	B	390	-43.680	98.871	45.713	1.00	60.31	BBBB
ATOM	6717	CA	ARG	B	390	-42.673	99.910	45.894	1.00	59.47	BBBB
ATOM	6718	CB	ARG	B	390	-43.341	101.227	46.302	1.00	61.97	BBBB
ATOM	6719	CG	ARG	B	390	-44.439	101.076	47.356	1.00	65.64	BBBB
ATOM	6720	CD	ARG	B	390	-43.895	100.778	48.753	1.00	68.81	BBBB
ATOM	6721	NE	ARG	B	390	-44.918	100.209	49.627	1.00	71.45	BBBB
ATOM	6722	CZ	ARG	B	390	-45.565	99.073	49.373	1.00	72.75	BBBB
ATOM	6723	NH1	ARG	B	390	-45.296	98.379	48.271	1.00	72.88	BBBB
ATOM	6724	NH2	ARG	B	390	-46.489	98.631	50.216	1.00	72.78	BBBB
ATOM	6725	C	ARG	B	390	-41.663	99.495	46.948	1.00	57.41	BBBB
ATOM	6726	O	ARG	B	390	-42.033	99.000	48.012	1.00	58.13	BBBB
ATOM	6727	N	THR	B	391	-40.384	99.670	46.640	1.00	53.62	BBBB
ATOM	6728	CA	THR	B	391	-39.343	99.328	47.588	1.00	50.14	BBBB
ATOM	6729	CB	THR	B	391	-38.423	98.226	47.033	1.00	50.81	BBBB
ATOM	6730	OG1	THR	B	391	-39.178	97.011	46.930	1.00	50.70	BBBB
ATOM	6731	CG2	THR	B	391	-37.242	97.974	47.959	1.00	50.83	BBBB
ATOM	6732	C	THR	B	391	-38.611	100.616	47.904	1.00	47.42	BBBB
ATOM	6733	O	THR	B	391	-39.185	101.681	47.744	1.00	47.89	BBBB
ATOM	6734	N	ASP	B	392	-37.365	100.553	48.337	1.00	44.29	BBBB
ATOM	6735	CA	ASP	B	392	-36.685	101.775	48.717	1.00	42.16	BBBB
ATOM	6736	CB	ASP	B	392	-37.416	102.355	49.918	1.00	45.64	BBBB
ATOM	6737	CG	ASP	B	392	-37.470	103.845	49.896	1.00	49.25	BBBB
ATOM	6738	OD1	ASP	B	392	-37.788	104.406	48.825	1.00	51.78	BBBB
ATOM	6739	OD2	ASP	B	392	-37.207	104.456	50.952	1.00	52.50	BBBB
ATOM	6740	C	ASP	B	392	-35.263	101.415	49.098	1.00	40.33	BBBB
ATOM	6741	O	ASP	B	392	-34.342	102.244	49.028	1.00	37.79	BBBB
ATOM	6742	N	LEU	B	393	-35.122	100.166	49.547	1.00	38.35	BBBB
ATOM	6743	CA	LEU	B	393	-33.840	99.592	49.934	1.00	34.78	BBBB
ATOM	6744	CB	LEU	B	393	-33.862	98.994	51.409	1.00	28.74	BBBB
ATOM	6745	CG	LEU	B	393	-34.734	97.961	52.193	1.00	22.05	BBBB

ATOM	6746	CD1	LEU	B	393	-34.107	97.665	53.503	1.00	15.92	BBBB
ATOM	6747	CD2	LEU	B	393	-36.100	98.467	52.488	1.00	18.82	BBBB
ATOM	6748	C	LEU	B	393	-33.477	98.557	48.842	1.00	35.23	BBBB
ATOM	6749	O	LEU	B	393	-33.449	98.895	47.661	1.00	32.27	BBBB
ATOM	6750	N	HIS	B	394	-33.237	97.308	49.228	1.00	37.25	BBBB
ATOM	6751	CA	HIS	B	394	-32.828	96.261	48.295	1.00	37.52	BBBB
ATOM	6752	CB	HIS	B	394	-31.379	96.506	47.867	1.00	36.36	BBBB
ATOM	6753	CG	HIS	B	394	-31.231	97.247	46.573	1.00	38.35	BBBB
ATOM	6754	CD2	HIS	B	394	-32.070	97.383	45.519	1.00	37.34	BBBB
ATOM	6755	ND1	HIS	B	394	-30.053	97.862	46.201	1.00	38.26	BBBB
ATOM	6756	CE1	HIS	B	394	-30.172	98.337	44.974	1.00	36.87	BBBB
ATOM	6757	NE2	HIS	B	394	-31.387	98.058	44.537	1.00	36.31	BBBB
ATOM	6758	C	HIS	B	394	-32.899	94.904	48.992	1.00	38.87	BBBB
ATOM	6759	O	HIS	B	394	-32.128	94.646	49.918	1.00	42.16	BBBB
ATOM	6760	N	ALA	B	395	-33.810	94.036	48.561	1.00	37.67	BBBB
ATOM	6761	CA	ALA	B	395	-33.932	92.701	49.148	1.00	34.77	BBBB
ATOM	6762	CB	ALA	B	395	-35.143	92.008	48.584	1.00	35.87	BBBB
ATOM	6763	C	ALA	B	395	-32.677	91.853	48.894	1.00	34.13	BBBB
ATOM	6764	O	ALA	B	395	-32.749	90.636	48.769	1.00	33.22	BBBB
ATOM	6765	N	PHE	B	396	-31.536	92.525	48.787	1.00	32.94	BBBB
ATOM	6766	CA	PHE	B	396	-30.239	91.899	48.600	1.00	30.16	BBBB
ATOM	6767	CB	PHE	B	396	-29.449	92.568	47.464	1.00	29.68	BBBB
ATOM	6768	CG	PHE	B	396	-29.651	91.946	46.101	1.00	27.56	BBBB
ATOM	6769	CD1	PHE	B	396	-29.413	90.595	45.890	1.00	27.24	BBBB
ATOM	6770	CD2	PHE	B	396	-30.051	92.729	45.021	1.00	27.20	BBBB
ATOM	6771	CE1	PHE	B	396	-29.571	90.039	44.636	1.00	26.83	BBBB
ATOM	6772	CE2	PHE	B	396	-30.212	92.184	43.763	1.00	24.99	BBBB
ATOM	6773	CZ	PHE	B	396	-29.973	90.842	43.568	1.00	27.16	BBBB
ATOM	6774	C	PHE	B	396	-29.532	92.195	49.920	1.00	30.72	BBBB
ATOM	6775	O	PHE	B	396	-28.305	92.208	49.991	1.00	30.70	BBBB
ATOM	6776	N	GLU	B	397	-30.323	92.443	50.963	1.00	31.05	BBBB
ATOM	6777	CA	GLU	B	397	-29.799	92.760	52.299	1.00	31.59	BBBB
ATOM	6778	CB	GLU	B	397	-30.931	92.774	53.320	1.00	31.76	BBBB
ATOM	6779	CG	GLU	B	397	-31.686	91.464	53.445	0.01	30.90	BBBB
ATOM	6780	CD	GLU	B	397	-32.673	91.479	54.594	0.01	30.61	BBBB
ATOM	6781	OE1	GLU	B	397	-33.527	92.389	54.633	0.01	30.45	BBBB
ATOM	6782	OE2	GLU	B	397	-32.598	90.580	55.458	0.01	30.48	BBBB
ATOM	6783	C	GLU	B	397	-28.704	91.830	52.814	1.00	32.08	BBBB
ATOM	6784	O	GLU	B	397	-27.866	92.236	53.618	1.00	31.49	BBBB
ATOM	6785	N	ASN	B	398	-28.713	90.584	52.349	1.00	32.34	BBBB
ATOM	6786	CA	ASN	B	398	-27.727	89.611	52.781	1.00	30.48	BBBB
ATOM	6787	CB	ASN	B	398	-28.399	88.270	53.034	1.00	29.75	BBBB
ATOM	6788	CG	ASN	B	398	-29.707	88.406	53.766	1.00	30.12	BBBB
ATOM	6789	OD1	ASN	B	398	-29.888	89.298	54.587	1.00	30.73	BBBB
ATOM	6790	ND2	ASN	B	398	-30.624	87.503	53.489	1.00	30.71	BBBB
ATOM	6791	C	ASN	B	398	-26.571	89.399	51.813	1.00	30.31	BBBB
ATOM	6792	O	ASN	B	398	-25.634	88.692	52.142	1.00	30.57	BBBB
ATOM	6793	N	LEU	B	399	-26.620	89.989	50.625	1.00	29.82	BBBB
ATOM	6794	CA	LEU	B	399	-25.524	89.789	49.680	1.00	31.31	BBBB
ATOM	6795	CB	LEU	B	399	-25.791	90.570	48.382	1.00	30.59	BBBB
ATOM	6796	CG	LEU	B	399	-25.086	90.078	47.112	1.00	28.93	BBBB
ATOM	6797	CD1	LEU	B	399	-25.867	88.919	46.555	1.00	29.32	BBBB
ATOM	6798	CD2	LEU	B	399	-24.988	91.174	46.080	1.00	26.53	BBBB
ATOM	6799	C	LEU	B	399	-24.169	90.208	50.302	1.00	31.72	BBBB
ATOM	6800	O	LEU	B	399	-23.892	91.392	50.470	1.00	30.73	BBBB
ATOM	6801	N	GLU	B	400	-23.333	89.219	50.622	1.00	33.21	BBBB
ATOM	6802	CA	GLU	B	400	-22.019	89.434	51.248	1.00	34.28	BBBB
ATOM	6803	CB	GLU	B	400	-21.730	88.317	52.253	1.00	36.96	BBBB
ATOM	6804	CG	GLU	B	400	-22.843	88.093	53.258	1.00	42.23	BBBB
ATOM	6805	CD	GLU	B	400	-22.462	87.121	54.356	1.00	44.52	BBBB
ATOM	6806	OE1	GLU	B	400	-23.347	86.769	55.171	1.00	46.09	BBBB
ATOM	6807	OE2	GLU	B	400	-21.280	86.719	54.405	1.00	45.40	BBBB
ATOM	6808	C	GLU	B	400	-20.831	89.522	50.298	1.00	33.46	BBBB
ATOM	6809	O	GLU	B	400	-19.882	90.276	50.536	1.00	33.07	BBBB
ATOM	6810	N	ILE	B	401	-20.869	88.735	49.231	1.00	32.94	BBBB
ATOM	6811	CA	ILE	B	401	-19.777	88.736	48.267	1.00	32.86	BBBB
ATOM	6812	CB	ILE	B	401	-18.838	87.506	48.468	1.00	35.06	BBBB
ATOM	6813	CG2	ILE	B	401	-17.599	87.653	47.607	1.00	34.82	BBBB
ATOM	6814	CG1	ILE	B	401	-18.413	87.383	49.937	1.00	36.89	BBBB
ATOM	6815	CD1	ILE	B	401	-17.475	86.204	50.226	1.00	36.51	BBBB
ATOM	6816	C	ILE	B	401	-20.257	88.701	46.820	1.00	30.62	BBBB
ATOM	6817	O	ILE	B	401	-21.123	87.913	46.465	1.00	30.45	BBBB
ATOM	6818	N	ILE	B	402	-19.705	89.582	45.998	1.00	28.99	BBBB
ATOM	6819	CA	ILE	B	402	-20.010	89.595	44.571	1.00	28.33	BBBB
ATOM	6820	CB	ILE	B	402	-20.509	90.974	44.037	1.00	29.35	BBBB

ATOM	6821	CG2	ILE	B	402	-20.836	90.850	42.564	1.00	29.84	BBBB
ATOM	6822	CG1	ILE	B	402	-21.782	91.430	44.753	1.00	29.51	BBBB
ATOM	6823	CD1	ILE	B	402	-22.218	92.830	44.354	1.00	27.58	BBBB
ATOM	6824	C	ILE	B	402	-18.639	89.328	43.965	1.00	26.96	BBBB
ATOM	6825	O	ILE	B	402	-17.797	90.220	43.910	1.00	23.71	BBBB
ATOM	6826	N	ARG	B	403	-18.403	88.088	43.556	1.00	27.66	BBBB
ATOM	6827	CA	ARG	B	403	-17.127	87.729	42.974	1.00	30.16	BBBB
ATOM	6828	CB	ARG	B	403	-17.188	86.317	42.429	1.00	30.85	BBBB
ATOM	6829	CG	ARG	B	403	-17.245	85.270	43.500	1.00	32.77	BBBB
ATOM	6830	CD	ARG	B	403	-15.902	85.107	44.176	1.00	34.30	BBBB
ATOM	6831	NE	ARG	B	403	-16.015	84.322	45.397	1.00	34.39	BBBB
ATOM	6832	CZ	ARG	B	403	-15.020	84.137	46.252	1.00	34.37	BBBB
ATOM	6833	NH1	ARG	B	403	-13.825	84.672	46.023	1.00	31.66	BBBB
ATOM	6834	NH2	ARG	B	403	-15.238	83.439	47.351	1.00	34.75	BBBB
ATOM	6835	C	ARG	B	403	-16.754	88.702	41.864	1.00	32.49	BBBB
ATOM	6836	O	ARG	B	403	-16.260	89.806	42.134	1.00	35.31	BBBB
ATOM	6837	N	GLY	B	404	-16.992	88.303	40.618	1.00	31.67	BBBB
ATOM	6838	CA	GLY	B	404	-16.666	89.168	39.502	1.00	30.86	BBBB
ATOM	6839	C	GLY	B	404	-15.914	88.449	38.403	1.00	30.15	BBBB
ATOM	6840	O	GLY	B	404	-15.156	89.047	37.652	1.00	29.75	BBBB
ATOM	6841	N	ARG	B	405	-16.127	87.150	38.306	1.00	30.02	BBBB
ATOM	6842	CA	ARG	B	405	-15.464	86.375	37.289	1.00	30.09	BBBB
ATOM	6843	CB	ARG	B	405	-15.740	84.892	37.531	1.00	28.71	BBBB
ATOM	6844	CG	ARG	B	405	-15.271	84.434	38.902	1.00	26.99	BBBB
ATOM	6845	CD	ARG	B	405	-15.296	82.930	39.032	1.00	29.51	BBBB
ATOM	6846	NE	ARG	B	405	-14.886	82.463	40.357	1.00	31.40	BBBB
ATOM	6847	CZ	ARG	B	405	-15.722	82.015	41.291	1.00	32.64	BBBB
ATOM	6848	NH1	ARG	B	405	-17.026	81.968	41.057	1.00	31.79	BBBB
ATOM	6849	NH2	ARG	B	405	-15.252	81.602	42.462	1.00	32.84	BBBB
ATOM	6850	C	ARG	B	405	-15.987	86.859	35.936	1.00	30.27	BBBB
ATOM	6851	O	ARG	B	405	-15.262	86.897	34.946	1.00	32.33	BBBB
ATOM	6852	N	THR	B	406	-17.247	87.255	35.905	1.00	29.52	BBBB
ATOM	6853	CA	THR	B	406	-17.836	87.773	34.687	1.00	29.14	BBBB
ATOM	6854	CB	THR	B	406	-18.979	86.887	34.228	1.00	28.44	BBBB
ATOM	6855	OG1	THR	B	406	-19.984	86.855	35.244	1.00	29.03	BBBB
ATOM	6856	CG2	THR	B	406	-18.478	85.474	33.987	1.00	28.00	BBBB
ATOM	6857	C	THR	B	406	-18.340	89.190	34.977	1.00	29.79	BBBB
ATOM	6858	O	THR	B	406	-18.996	89.453	35.992	1.00	29.40	BBBB
ATOM	6859	N	LYS	B	407	-18.016	90.107	34.081	1.00	29.17	BBBB
ATOM	6860	CA	LYS	B	407	-18.395	91.499	34.252	1.00	28.68	BBBB
ATOM	6861	CB	LYS	B	407	-17.130	92.365	34.206	1.00	28.31	BBBB
ATOM	6862	CG	LYS	B	407	-15.950	91.819	35.035	1.00	26.78	BBBB
ATOM	6863	CD	LYS	B	407	-14.728	92.710	34.902	0.01	26.53	BBBB
ATOM	6864	CE	LYS	B	407	-13.556	92.164	35.700	0.01	26.18	BBBB
ATOM	6865	NZ	LYS	B	407	-12.345	93.019	35.561	0.01	25.91	BBBB
ATOM	6866	C	LYS	B	407	-19.355	91.920	33.145	1.00	28.51	BBBB
ATOM	6867	O	LYS	B	407	-19.318	91.359	32.055	1.00	30.01	BBBB
ATOM	6868	N	GLN	B	408	-20.229	92.886	33.426	1.00	27.63	BBBB
ATOM	6869	CA	GLN	B	408	-21.159	93.382	32.415	1.00	25.77	BBBB
ATOM	6870	CB	GLN	B	408	-22.357	94.068	33.074	1.00	26.05	BBBB
ATOM	6871	CG	GLN	B	408	-23.157	94.969	32.151	1.00	27.53	BBBB
ATOM	6872	CD	GLN	B	408	-23.820	94.217	31.040	1.00	29.27	BBBB
ATOM	6873	OE1	GLN	B	408	-23.334	93.177	30.624	1.00	31.99	BBBB
ATOM	6874	NE2	GLN	B	408	-24.932	94.742	30.536	1.00	28.69	BBBB
ATOM	6875	C	GLN	B	408	-20.359	94.356	31.550	1.00	25.39	BBBB
ATOM	6876	O	GLN	B	408	-19.632	95.214	32.065	1.00	22.33	BBBB
ATOM	6877	N	HIS	B	409	-20.493	94.191	30.234	1.00	27.08	BBBB
ATOM	6878	CA	HIS	B	409	-19.769	94.975	29.234	1.00	28.73	BBBB
ATOM	6879	CB	HIS	B	409	-20.147	96.449	29.299	1.00	29.06	BBBB
ATOM	6880	CG	HIS	B	409	-21.505	96.736	28.745	1.00	29.82	BBBB
ATOM	6881	CD2	HIS	B	409	-22.361	95.955	28.047	1.00	28.65	BBBB
ATOM	6882	ND1	HIS	B	409	-22.124	97.959	28.881	1.00	29.14	BBBB
ATOM	6883	CE1	HIS	B	409	-23.304	97.917	28.292	1.00	29.34	BBBB
ATOM	6884	NE2	HIS	B	409	-23.472	96.712	27.778	1.00	28.95	BBBB
ATOM	6885	C	HIS	B	409	-18.306	94.809	29.515	1.00	30.07	BBBB
ATOM	6886	O	HIS	B	409	-17.521	95.721	29.330	1.00	31.55	BBBB
ATOM	6887	N	GLY	B	410	-17.948	93.621	29.978	1.00	31.85	BBBB
ATOM	6888	CA	GLY	B	410	-16.566	93.330	30.308	1.00	34.37	BBBB
ATOM	6889	C	GLY	B	410	-15.883	94.293	31.270	1.00	34.01	BBBB
ATOM	6890	O	GLY	B	410	-14.659	94.294	31.369	1.00	35.15	BBBB
ATOM	6891	N	GLN	B	411	-16.657	95.095	31.992	1.00	33.54	BBBB
ATOM	6892	CA	GLN	B	411	-16.076	96.055	32.918	1.00	32.68	BBBB
ATOM	6893	CB	GLN	B	411	-16.204	97.469	32.356	1.00	34.28	BBBB
ATOM	6894	CG	GLN	B	411	-15.236	97.790	31.263	1.00	38.86	BBBB
ATOM	6895	CD	GLN	B	411	-13.824	97.898	31.778	1.00	41.23	BBBB

ATOM	6896	OE1	GLN	B	411	-13.501	98.806	32.543	1.00	42.41	BBBB
ATOM	6897	NE2	GLN	B	411	-12.970	96.968	31.364	1.00	43.11	BBBB
ATOM	6898	C	GLN	B	411	-16.664	96.064	34.314	1.00	31.90	BBBB
ATOM	6899	O	GLN	B	411	-15.931	96.143	35.295	1.00	31.78	BBBB
ATOM	6900	N	PHE	B	412	-17.986	95.967	34.407	1.00	30.20	BBBB
ATOM	6901	CA	PHE	B	412	-18.637	96.072	35.703	1.00	27.49	BBBB
ATOM	6902	CB	PHE	B	412	-19.734	97.129	35.609	1.00	26.56	BBBB
ATOM	6903	CG	PHE	B	412	-19.304	98.388	34.890	1.00	25.65	BBBB
ATOM	6904	CD1	PHE	B	412	-19.124	98.393	33.502	1.00	25.68	BBBB
ATOM	6905	CD2	PHE	B	412	-19.140	99.577	35.578	1.00	23.59	BBBB
ATOM	6906	CE1	PHE	B	412	-18.803	99.555	32.820	1.00	21.68	BBBB
ATOM	6907	CE2	PHE	B	412	-18.820	100.740	34.898	1.00	23.64	BBBB
ATOM	6908	CZ	PHE	B	412	-18.654	100.724	33.513	1.00	23.24	BBBB
ATOM	6909	C	PHE	B	412	-19.197	94.839	36.382	1.00	26.54	BBBB
ATOM	6910	O	PHE	B	412	-19.963	94.073	35.797	1.00	26.59	BBBB
ATOM	6911	N	SER	B	413	-18.813	94.670	37.644	1.00	24.18	BBBB
ATOM	6912	CA	SER	B	413	-19.284	93.560	38.453	1.00	21.81	BBBB
ATOM	6913	CB	SER	B	413	-18.213	93.142	39.441	1.00	20.05	BBBB
ATOM	6914	OG	SER	B	413	-17.697	94.278	40.106	1.00	20.68	BBBB
ATOM	6915	C	SER	B	413	-20.513	94.050	39.199	1.00	21.83	BBBB
ATOM	6916	O	SER	B	413	-21.353	93.260	39.630	1.00	22.48	BBBB
ATOM	6917	N	LEU	B	414	-20.616	95.367	39.342	1.00	21.74	BBBB
ATOM	6918	CA	LEU	B	414	-21.759	95.965	40.017	1.00	21.22	BBBB
ATOM	6919	CB	LEU	B	414	-21.405	96.276	41.478	1.00	22.05	BBBB
ATOM	6920	CG	LEU	B	414	-22.495	96.864	42.378	1.00	23.27	BBBB
ATOM	6921	CD1	LEU	B	414	-23.836	96.156	42.200	1.00	23.70	BBBB
ATOM	6922	CD2	LEU	B	414	-22.021	96.746	43.795	1.00	23.49	BBBB
ATOM	6923	C	LEU	B	414	-22.272	97.219	39.312	1.00	19.78	BBBB
ATOM	6924	O	LEU	B	414	-21.642	98.265	39.333	1.00	19.51	BBBB
ATOM	6925	N	ALA	B	415	-23.440	97.093	38.702	1.00	18.02	BBBB
ATOM	6926	CA	ALA	B	415	-24.067	98.180	37.979	1.00	16.50	BBBB
ATOM	6927	CB	ALA	B	415	-24.152	97.827	36.505	1.00	14.98	BBBB
ATOM	6928	C	ALA	B	415	-25.456	98.429	38.519	1.00	16.86	BBBB
ATOM	6929	O	ALA	B	415	-26.345	97.599	38.341	1.00	19.21	BBBB
ATOM	6930	N	VAL	B	416	-25.657	99.564	39.170	1.00	16.28	BBBB
ATOM	6931	CA	VAL	B	416	-26.972	99.906	39.715	1.00	17.63	BBBB
ATOM	6932	CB	VAL	B	416	-26.942	100.024	41.273	1.00	16.29	BBBB
ATOM	6933	CG1	VAL	B	416	-28.202	100.662	41.773	1.00	14.58	BBBB
ATOM	6934	CG2	VAL	B	416	-26.787	98.652	41.904	1.00	14.67	BBBB
ATOM	6935	C	VAL	B	416	-27.330	101.248	39.105	1.00	19.27	BBBB
ATOM	6936	O	VAL	B	416	-26.961	102.283	39.626	1.00	21.90	BBBB
ATOM	6937	N	VAL	B	417	-28.067	101.223	38.005	1.00	20.39	BBBB
ATOM	6938	CA	VAL	B	417	-28.417	102.444	37.286	1.00	20.14	BBBB
ATOM	6939	CB	VAL	B	417	-27.979	102.306	35.802	1.00	19.44	BBBB
ATOM	6940	CG1	VAL	B	417	-28.545	103.423	34.986	1.00	21.04	BBBB
ATOM	6941	CG2	VAL	B	417	-26.468	102.298	35.699	1.00	18.28	BBBB
ATOM	6942	C	VAL	B	417	-29.874	102.904	37.319	1.00	19.80	BBBB
ATOM	6943	O	VAL	B	417	-30.792	102.106	37.359	1.00	19.28	BBBB
ATOM	6944	N	SER	B	418	-30.044	104.222	37.299	1.00	20.46	BBBB
ATOM	6945	CA	SER	B	418	-31.331	104.919	37.275	1.00	19.96	BBBB
ATOM	6946	CB	SER	B	418	-31.733	105.152	35.846	1.00	17.96	BBBB
ATOM	6947	OG	SER	B	418	-32.161	103.933	35.313	1.00	19.23	BBBB
ATOM	6948	C	SER	B	418	-32.546	104.348	37.996	1.00	22.29	BBBB
ATOM	6949	O	SER	B	418	-33.516	103.938	37.354	1.00	21.22	BBBB
ATOM	6950	N	LEU	B	419	-32.513	104.363	39.323	1.00	24.67	BBBB
ATOM	6951	CA	LEU	B	419	-33.626	103.864	40.103	1.00	28.55	BBBB
ATOM	6952	CB	LEU	B	419	-33.180	102.707	41.011	1.00	30.43	BBBB
ATOM	6953	CG	LEU	B	419	-32.781	101.330	40.442	1.00	31.47	BBBB
ATOM	6954	CD1	LEU	B	419	-33.399	101.119	39.052	1.00	30.17	BBBB
ATOM	6955	CD2	LEU	B	419	-31.273	101.215	40.387	1.00	29.26	BBBB
ATOM	6956	C	LEU	B	419	-34.187	104.985	40.958	1.00	30.86	BBBB
ATOM	6957	O	LEU	B	419	-33.451	105.872	41.396	1.00	32.24	BBBB
ATOM	6958	N	ASN	B	420	-35.493	104.964	41.191	1.00	33.04	BBBB
ATOM	6959	CA	ASN	B	420	-36.093	105.994	42.028	1.00	35.12	BBBB
ATOM	6960	CB	ASN	B	420	-37.579	106.184	41.686	1.00	37.87	BBBB
ATOM	6961	CG	ASN	B	420	-37.831	107.386	40.764	1.00	41.25	BBBB
ATOM	6962	OD1	ASN	B	420	-37.131	108.396	40.843	1.00	42.55	BBBB
ATOM	6963	ND2	ASN	B	420	-38.853	107.287	39.907	1.00	44.32	BBBB
ATOM	6964	C	ASN	B	420	-35.934	105.542	43.477	1.00	35.05	BBBB
ATOM	6965	O	ASN	B	420	-36.852	105.650	44.281	1.00	37.30	BBBB
ATOM	6966	N	ILE	B	421	-34.748	105.048	43.803	1.00	33.77	BBBB
ATOM	6967	CA	ILE	B	421	-34.458	104.536	45.137	1.00	33.63	BBBB
ATOM	6968	CB	ILE	B	421	-33.697	103.181	44.989	1.00	31.75	BBBB
ATOM	6969	CG2	ILE	B	421	-32.342	103.205	45.670	1.00	31.37	BBBB
ATOM	6970	CG1	ILE	B	421	-34.602	102.070	45.498	1.00	30.80	BBBB

ATOM	6971	CD1	ILE	B	421	-36.087	102.311	45.167	1.00	31.14	BBBB
ATOM	6972	C	ILE	B	421	-33.727	105.528	46.045	1.00	34.58	BBBB
ATOM	6973	O	ILE	B	421	-33.087	106.454	45.554	1.00	35.21	BBBB
ATOM	6974	N	THR	B	422	-33.842	105.344	47.363	1.00	35.59	BBBB
ATOM	6975	CA	THR	B	422	-33.206	106.244	48.340	1.00	37.07	BBBB
ATOM	6976	CB	THR	B	422	-34.042	106.372	49.619	1.00	37.85	BBBB
ATOM	6977	OG1	THR	B	422	-35.338	106.870	49.300	1.00	39.28	BBBB
ATOM	6978	CG2	THR	B	422	-33.382	107.331	50.583	1.00	39.87	BBBB
ATOM	6979	C	THR	B	422	-31.809	105.821	48.790	1.00	36.89	BBBB
ATOM	6980	O	THR	B	422	-30.812	106.461	48.462	1.00	36.37	BBBB
ATOM	6981	N	SER	B	423	-31.767	104.747	49.570	1.00	36.49	BBBB
ATOM	6982	CA	SER	B	423	-30.530	104.203	50.109	1.00	36.29	BBBB
ATOM	6983	CB	SER	B	423	-30.697	103.977	51.621	1.00	36.94	BBBB
ATOM	6984	OG	SER	B	423	-29.872	102.927	52.103	1.00	36.21	BBBB
ATOM	6985	C	SER	B	423	-30.196	102.887	49.416	1.00	35.80	BBBB
ATOM	6986	O	SER	B	423	-31.101	102.131	49.061	1.00	36.06	BBBB
ATOM	6987	N	LEU	B	424	-28.906	102.608	49.226	1.00	34.23	BBBB
ATOM	6988	CA	LEU	B	424	-28.508	101.359	48.581	1.00	31.17	BBBB
ATOM	6989	CB	LEU	B	424	-26.980	101.264	48.457	1.00	28.98	BBBB
ATOM	6990	CG	LEU	B	424	-26.337	102.154	47.384	1.00	26.36	BBBB
ATOM	6991	CD1	LEU	B	424	-24.906	101.764	47.125	1.00	23.15	BBBB
ATOM	6992	CD2	LEU	B	424	-27.118	102.005	46.117	1.00	25.83	BBBB
ATOM	6993	C	LEU	B	424	-29.069	100.165	49.358	1.00	30.95	BBBB
ATOM	6994	O	LEU	B	424	-29.932	99.439	48.845	1.00	30.36	BBBB
ATOM	6995	N	GLY	B	425	-28.595	99.965	50.587	1.00	29.45	BBBB
ATOM	6996	CA	GLY	B	425	-29.097	98.859	51.398	1.00	28.75	BBBB
ATOM	6997	C	GLY	B	425	-28.294	97.563	51.402	1.00	27.10	BBBB
ATOM	6998	O	GLY	B	425	-28.752	96.533	51.886	1.00	26.04	BBBB
ATOM	6999	N	LEU	B	426	-27.098	97.615	50.834	1.00	26.48	BBBB
ATOM	7000	CA	LEU	B	426	-26.214	96.467	50.793	1.00	24.10	BBBB
ATOM	7001	CB	LEU	B	426	-25.214	96.615	49.643	1.00	22.15	BBBB
ATOM	7002	CG	LEU	B	426	-25.701	96.332	48.218	1.00	20.49	BBBB
ATOM	7003	CD1	LEU	B	426	-27.035	96.977	47.954	1.00	18.01	BBBB
ATOM	7004	CD2	LEU	B	426	-24.660	96.825	47.255	1.00	18.28	BBBB
ATOM	7005	C	LEU	B	426	-25.493	96.492	52.122	1.00	24.42	BBBB
ATOM	7006	O	LEU	B	426	-24.314	96.784	52.190	1.00	24.52	BBBB
ATOM	7007	N	ARG	B	427	-26.229	96.210	53.187	1.00	25.10	BBBB
ATOM	7008	CA	ARG	B	427	-25.673	96.208	54.534	1.00	26.01	BBBB
ATOM	7009	CB	ARG	B	427	-26.725	95.748	55.529	1.00	24.29	BBBB
ATOM	7010	CG	ARG	B	427	-27.556	96.856	56.085	1.00	24.43	BBBB
ATOM	7011	CD	ARG	B	427	-28.384	96.328	57.195	1.00	25.22	BBBB
ATOM	7012	NE	ARG	B	427	-29.347	95.356	56.703	1.00	28.26	BBBB
ATOM	7013	CZ	ARG	B	427	-30.381	95.679	55.938	1.00	29.76	BBBB
ATOM	7014	NH1	ARG	B	427	-30.570	96.952	55.583	1.00	28.11	BBBB
ATOM	7015	NH2	ARG	B	427	-31.231	94.738	55.547	1.00	28.79	BBBB
ATOM	7016	C	ARG	B	427	-24.455	95.322	54.692	1.00	28.00	BBBB
ATOM	7017	O	ARG	B	427	-23.392	95.770	55.127	1.00	29.83	BBBB
ATOM	7018	N	SER	B	428	-24.625	94.059	54.326	1.00	28.21	BBBB
ATOM	7019	CA	SER	B	428	-23.583	93.058	54.440	1.00	28.21	BBBB
ATOM	7020	CB	SER	B	428	-24.258	91.739	54.732	1.00	27.27	BBBB
ATOM	7021	OG	SER	B	428	-25.554	91.778	54.174	1.00	25.95	BBBB
ATOM	7022	C	SER	B	428	-22.604	92.885	53.276	1.00	29.94	BBBB
ATOM	7023	O	SER	B	428	-21.897	91.882	53.227	1.00	31.84	BBBB
ATOM	7024	N	LEU	B	429	-22.543	93.833	52.345	1.00	30.44	BBBB
ATOM	7025	CA	LEU	B	429	-21.614	93.696	51.232	1.00	31.85	BBBB
ATOM	7026	CB	LEU	B	429	-21.949	94.675	50.109	1.00	33.37	BBBB
ATOM	7027	CG	LEU	B	429	-21.111	94.525	48.827	1.00	35.05	BBBB
ATOM	7028	CD1	LEU	B	429	-21.329	93.137	48.218	1.00	34.13	BBBB
ATOM	7029	CD2	LEU	B	429	-21.480	95.624	47.834	1.00	34.76	BBBB
ATOM	7030	C	LEU	B	429	-20.239	93.994	51.777	1.00	33.15	BBBB
ATOM	7031	O	LEU	B	429	-19.975	95.113	52.217	1.00	34.39	BBBB
ATOM	7032	N	LYS	B	430	-19.361	92.996	51.759	1.00	33.23	BBBB
ATOM	7033	CA	LYS	B	430	-18.022	93.185	52.291	1.00	33.14	BBBB
ATOM	7034	CB	LYS	B	430	-17.806	92.346	53.548	1.00	35.30	BBBB
ATOM	7035	CG	LYS	B	430	-17.953	93.130	54.855	1.00	38.58	BBBB
ATOM	7036	CD	LYS	B	430	-17.604	92.252	56.066	1.00	39.78	BBBB
ATOM	7037	CE	LYS	B	430	-17.544	93.058	57.357	1.00	38.68	BBBB
ATOM	7038	NZ	LYS	B	430	-18.822	93.757	57.618	1.00	39.50	BBBB
ATOM	7039	C	LYS	B	430	-16.935	92.860	51.317	1.00	33.09	BBBB
ATOM	7040	O	LYS	B	430	-15.767	92.898	51.683	1.00	33.23	BBBB
ATOM	7041	N	GLU	B	431	-17.303	92.541	50.080	1.00	33.73	BBBB
ATOM	7042	CA	GLU	B	431	-16.299	92.226	49.062	1.00	32.73	BBBB
ATOM	7043	CB	GLU	B	431	-15.590	90.909	49.408	1.00	32.54	BBBB
ATOM	7044	CG	GLU	B	431	-14.245	90.698	48.711	1.00	33.43	BBBB
ATOM	7045	CD	GLU	B	431	-13.908	89.215	48.500	1.00	36.06	BBBB

ATOM	7046	OE1	GLU	B	431	-12.751	88.901	48.141	1.00	33.71	BBBB
ATOM	7047	OE2	GLU	B	431	-14.808	88.361	48.680	1.00	37.07	BBBB
ATOM	7048	C	GLU	B	431	-16.851	92.119	47.642	1.00	31.80	BBBB
ATOM	7049	O	GLU	B	431	-17.896	91.515	47.405	1.00	32.86	BBBB
ATOM	7050	N	ILE	B	432	-16.133	92.738	46.713	1.00	29.58	BBBB
ATOM	7051	CA	ILE	B	432	-16.430	92.693	45.284	1.00	27.95	BBBB
ATOM	7052	CB	ILE	B	432	-16.883	94.062	44.729	1.00	25.98	BBBB
ATOM	7053	CG2	ILE	B	432	-17.562	93.881	43.390	1.00	25.61	BBBB
ATOM	7054	CG1	ILE	B	432	-17.935	94.678	45.631	1.00	25.79	BBBB
ATOM	7055	CD1	ILE	B	432	-18.442	95.988	45.124	1.00	23.33	BBBB
ATOM	7056	C	ILE	B	432	-15.029	92.355	44.765	1.00	27.96	BBBB
ATOM	7057	O	ILE	B	432	-14.329	93.198	44.210	1.00	26.26	BBBB
ATOM	7058	N	SER	B	433	-14.630	91.108	45.002	1.00	28.84	BBBB
ATOM	7059	CA	SER	B	433	-13.308	90.603	44.655	1.00	28.60	BBBB
ATOM	7060	CB	SER	B	433	-13.323	89.080	44.583	1.00	26.46	BBBB
ATOM	7061	OG	SER	B	433	-14.617	88.593	44.313	1.00	22.95	BBBB
ATOM	7062	C	SER	B	433	-12.756	91.163	43.379	1.00	30.61	BBBB
ATOM	7063	O	SER	B	433	-11.571	91.465	43.290	1.00	31.84	BBBB
ATOM	7064	N	ASP	B	434	-13.612	91.304	42.381	1.00	31.75	BBBB
ATOM	7065	CA	ASP	B	434	-13.158	91.846	41.120	1.00	33.11	BBBB
ATOM	7066	CB	ASP	B	434	-12.418	90.797	40.309	1.00	33.78	BBBB
ATOM	7067	CG	ASP	B	434	-12.009	91.322	38.965	1.00	35.76	BBBB
ATOM	7068	OD1	ASP	B	434	-11.627	92.511	38.911	1.00	36.89	BBBB
ATOM	7069	OD2	ASP	B	434	-12.061	90.566	37.975	1.00	36.10	BBBB
ATOM	7070	C	ASP	B	434	-14.292	92.377	40.292	1.00	33.23	BBBB
ATOM	7071	O	ASP	B	434	-15.400	91.852	40.329	1.00	34.09	BBBB
ATOM	7072	N	GLY	B	435	-13.999	93.421	39.533	1.00	31.49	BBBB
ATOM	7073	CA	GLY	B	435	-15.008	94.020	38.698	1.00	30.11	BBBB
ATOM	7074	C	GLY	B	435	-14.991	95.517	38.867	1.00	29.83	BBBB
ATOM	7075	O	GLY	B	435	-13.973	96.113	39.220	1.00	30.91	BBBB
ATOM	7076	N	ASP	B	436	-16.125	96.139	38.598	1.00	28.00	BBBB
ATOM	7077	CA	ASP	B	436	-16.218	97.570	38.736	1.00	24.75	BBBB
ATOM	7078	CB	ASP	B	436	-16.006	98.262	37.392	1.00	25.24	BBBB
ATOM	7079	CG	ASP	B	436	-14.731	99.051	37.363	1.00	26.51	BBBB
ATOM	7080	OD1	ASP	B	436	-13.686	98.460	37.677	1.00	29.24	BBBB
ATOM	7081	OD2	ASP	B	436	-14.763	100.252	37.042	1.00	26.62	BBBB
ATOM	7082	C	ASP	B	436	-17.570	97.902	39.279	1.00	22.39	BBBB
ATOM	7083	O	ASP	B	436	-18.509	97.115	39.147	1.00	19.14	BBBB
ATOM	7084	N	VAL	B	437	-17.650	99.057	39.927	1.00	20.91	BBBB
ATOM	7085	CA	VAL	B	437	-18.907	99.501	40.468	1.00	20.51	BBBB
ATOM	7086	CB	VAL	B	437	-18.883	99.678	42.006	1.00	18.66	BBBB
ATOM	7087	CG1	VAL	B	437	-20.220	100.254	42.466	1.00	14.33	BBBB
ATOM	7088	CG2	VAL	B	437	-18.637	98.329	42.691	1.00	14.68	BBBB
ATOM	7089	C	VAL	B	437	-19.243	100.819	39.848	1.00	20.51	BBBB
ATOM	7090	O	VAL	B	437	-18.383	101.662	39.683	1.00	21.45	BBBB
ATOM	7091	N	ILE	B	438	-20.505	100.960	39.468	1.00	21.63	BBBB
ATOM	7092	CA	ILE	B	438	-21.026	102.188	38.907	1.00	21.36	BBBB
ATOM	7093	CB	ILE	B	438	-21.075	102.166	37.389	1.00	20.78	BBBB
ATOM	7094	CG2	ILE	B	438	-21.674	100.865	36.912	1.00	19.10	BBBB
ATOM	7095	CG1	ILE	B	438	-21.860	103.391	36.905	1.00	21.09	BBBB
ATOM	7096	CD1	ILE	B	438	-22.237	103.382	35.441	1.00	22.08	BBBB
ATOM	7097	C	ILE	B	438	-22.449	102.343	39.416	1.00	21.96	BBBB
ATOM	7098	O	ILE	B	438	-23.303	101.508	39.154	1.00	23.38	BBBB
ATOM	7099	N	ILE	B	439	-22.690	103.392	40.186	1.00	22.47	BBBB
ATOM	7100	CA	ILE	B	439	-24.020	103.666	40.696	1.00	22.57	BBBB
ATOM	7101	CB	ILE	B	439	-24.014	103.880	42.217	1.00	22.84	BBBB
ATOM	7102	CG2	ILE	B	439	-25.422	103.820	42.741	1.00	21.61	BBBB
ATOM	7103	CG1	ILE	B	439	-23.151	102.820	42.907	1.00	23.04	BBBB
ATOM	7104	CD1	ILE	B	439	-23.725	101.441	42.854	1.00	23.84	BBBB
ATOM	7105	C	ILE	B	439	-24.292	104.989	40.007	1.00	24.05	BBBB
ATOM	7106	O	ILE	B	439	-23.658	105.988	40.333	1.00	24.47	BBBB
ATOM	7107	N	SER	B	440	-25.198	104.996	39.035	1.00	25.10	BBBB
ATOM	7108	CA	SER	B	440	-25.487	106.219	38.302	1.00	26.65	BBBB
ATOM	7109	CB	SER	B	440	-24.578	106.290	37.073	1.00	26.83	BBBB
ATOM	7110	OG	SER	B	440	-25.309	106.519	35.878	1.00	29.85	BBBB
ATOM	7111	C	SER	B	440	-26.938	106.420	37.872	1.00	27.87	BBBB
ATOM	7112	O	SER	B	440	-27.723	105.471	37.775	1.00	26.96	BBBB
ATOM	7113	N	GLY	B	441	-27.273	107.682	37.622	1.00	28.21	BBBB
ATOM	7114	CA	GLY	B	441	-28.600	108.048	37.170	1.00	29.53	BBBB
ATOM	7115	C	GLY	B	441	-29.698	107.869	38.187	1.00	30.58	BBBB
ATOM	7116	O	GLY	B	441	-30.867	107.791	37.831	1.00	30.14	BBBB
ATOM	7117	N	ASN	B	442	-29.327	107.821	39.457	1.00	32.35	BBBB
ATOM	7118	CA	ASN	B	442	-30.296	107.633	40.523	1.00	34.74	BBBB
ATOM	7119	CB	ASN	B	442	-29.697	106.734	41.579	1.00	33.87	BBBB
ATOM	7120	CG	ASN	B	442	-29.151	105.461	40.995	1.00	33.10	BBBB

ATOM	7121	OD1	ASN	B	442	-29.899	104.631	40.481	1.00	30.99	BBBB
ATOM	7122	ND2	ASN	B	442	-27.838	105.301	41.061	1.00	33.33	BBBB
ATOM	7123	C	ASN	B	442	-30.673	108.961	41.121	1.00	36.64	BBBB
ATOM	7124	O	ASN	B	442	-29.982	109.471	41.991	1.00	38.09	BBBB
ATOM	7125	N	LYS	B	443	-31.787	109.506	40.651	1.00	39.17	BBBB
ATOM	7126	CA	LYS	B	443	-32.278	110.808	41.087	1.00	41.00	BBBB
ATOM	7127	CB	LYS	B	443	-33.549	111.148	40.282	1.00	43.73	BBBB
ATOM	7128	CG	LYS	B	443	-33.972	112.624	40.324	1.00	48.71	BBBB
ATOM	7129	CD	LYS	B	443	-35.197	112.919	39.438	1.00	50.39	BBBB
ATOM	7130	CE	LYS	B	443	-35.536	114.424	39.434	1.00	51.88	BBBB
ATOM	7131	NZ	LYS	B	443	-36.767	114.796	38.643	1.00	52.04	BBBB
ATOM	7132	C	LYS	B	443	-32.533	110.980	42.601	1.00	39.97	BBBB
ATOM	7133	O	LYS	B	443	-32.682	112.105	43.074	1.00	40.10	BBBB
ATOM	7134	N	ASN	B	444	-32.575	109.889	43.362	1.00	38.42	BBBB
ATOM	7135	CA	ASN	B	444	-32.826	109.997	44.799	1.00	36.72	BBBB
ATOM	7136	CB	ASN	B	444	-34.223	109.478	45.163	1.00	36.16	BBBB
ATOM	7137	CG	ASN	B	444	-35.317	110.074	44.320	1.00	35.45	BBBB
ATOM	7138	OD1	ASN	B	444	-35.280	111.253	43.997	1.00	37.05	BBBB
ATOM	7139	ND2	ASN	B	444	-36.317	109.266	43.976	1.00	33.66	BBBB
ATOM	7140	C	ASN	B	444	-31.850	109.198	45.640	1.00	36.73	BBBB
ATOM	7141	O	ASN	B	444	-32.142	108.927	46.795	1.00	39.46	BBBB
ATOM	7142	N	LEU	B	445	-30.702	108.814	45.102	1.00	35.45	BBBB
ATOM	7143	CA	LEU	B	445	-29.787	107.985	45.885	1.00	33.84	BBBB
ATOM	7144	CB	LEU	B	445	-29.001	107.047	44.968	1.00	31.18	BBBB
ATOM	7145	CG	LEU	B	445	-28.769	105.637	45.505	1.00	26.65	BBBB
ATOM	7146	CD1	LEU	B	445	-28.049	104.836	44.486	1.00	26.40	BBBB
ATOM	7147	CD2	LEU	B	445	-27.972	105.673	46.767	1.00	27.17	BBBB
ATOM	7148	C	LEU	B	445	-28.806	108.703	46.784	1.00	34.44	BBBB
ATOM	7149	O	LEU	B	445	-27.788	109.205	46.316	1.00	35.09	BBBB
ATOM	7150	N	CYS	B	446	-29.090	108.703	48.083	1.00	35.12	BBBB
ATOM	7151	CA	CYS	B	446	-28.216	109.341	49.057	1.00	36.68	BBBB
ATOM	7152	C	CYS	B	446	-27.188	108.364	49.643	1.00	35.82	BBBB
ATOM	7153	O	CYS	B	446	-27.194	107.183	49.306	1.00	36.60	BBBB
ATOM	7154	CB	CYS	B	446	-29.065	109.956	50.157	1.00	40.92	BBBB
ATOM	7155	SG	CYS	B	446	-30.177	111.284	49.575	1.00	45.78	BBBB
ATOM	7156	N	TYR	B	447	-26.315	108.864	50.521	1.00	35.02	BBBB
ATOM	7157	CA	TYR	B	447	-25.234	108.084	51.173	1.00	32.52	BBBB
ATOM	7158	CB	TYR	B	447	-25.669	107.444	52.512	1.00	28.42	BBBB
ATOM	7159	CG	TYR	B	447	-27.114	107.579	52.891	1.00	27.69	BBBB
ATOM	7160	CD1	TYR	B	447	-28.096	106.852	52.237	1.00	27.36	BBBB
ATOM	7161	CE1	TYR	B	447	-29.436	107.001	52.568	1.00	28.05	BBBB
ATOM	7162	CD2	TYR	B	447	-27.503	108.462	53.896	1.00	27.52	BBBB
ATOM	7163	CE2	TYR	B	447	-28.837	108.623	54.233	1.00	27.58	BBBB
ATOM	7164	CZ	TYR	B	447	-29.799	107.891	53.567	1.00	28.17	BBBB
ATOM	7165	OH	TYR	B	447	-31.123	108.051	53.893	1.00	28.39	BBBB
ATOM	7166	C	TYR	B	447	-24.569	106.986	50.371	1.00	32.12	BBBB
ATOM	7167	O	TYR	B	447	-24.600	105.834	50.781	1.00	32.78	BBBB
ATOM	7168	N	ALA	B	448	-23.940	107.321	49.254	1.00	31.79	BBBB
ATOM	7169	CA	ALA	B	448	-23.297	106.282	48.472	1.00	32.80	BBBB
ATOM	7170	CB	ALA	B	448	-24.024	106.098	47.149	1.00	30.89	BBBB
ATOM	7171	C	ALA	B	448	-21.814	106.553	48.248	1.00	34.20	BBBB
ATOM	7172	O	ALA	B	448	-21.056	105.651	47.896	1.00	33.29	BBBB
ATOM	7173	N	ASN	B	449	-21.391	107.796	48.454	1.00	36.42	BBBB
ATOM	7174	CA	ASN	B	449	-19.979	108.122	48.290	1.00	37.59	BBBB
ATOM	7175	CB	ASN	B	449	-19.789	109.507	47.698	1.00	39.65	BBBB
ATOM	7176	CG	ASN	B	449	-18.343	109.784	47.350	1.00	42.79	BBBB
ATOM	7177	OD1	ASN	B	449	-17.602	110.371	48.138	1.00	44.97	BBBB
ATOM	7178	ND2	ASN	B	449	-17.926	109.340	46.169	1.00	44.66	BBBB
ATOM	7179	C	ASN	B	449	-19.355	108.074	49.662	1.00	36.91	BBBB
ATOM	7180	O	ASN	B	449	-18.270	108.586	49.891	1.00	35.63	BBBB
ATOM	7181	N	THR	B	450	-20.072	107.436	50.574	1.00	37.77	BBBB
ATOM	7182	CA	THR	B	450	-19.633	107.297	51.949	1.00	37.50	BBBB
ATOM	7183	CB	THR	B	450	-20.849	107.327	52.905	1.00	36.38	BBBB
ATOM	7184	OG1	THR	B	450	-21.811	106.344	52.500	1.00	34.85	BBBB
ATOM	7185	CG2	THR	B	450	-21.490	108.693	52.886	1.00	34.80	BBBB
ATOM	7186	C	THR	B	450	-18.850	106.003	52.139	1.00	37.24	BBBB
ATOM	7187	O	THR	B	450	-17.801	105.998	52.778	1.00	37.33	BBBB
ATOM	7188	N	ILE	B	451	-19.355	104.907	51.581	1.00	37.04	BBBB
ATOM	7189	CA	ILE	B	451	-18.668	103.635	51.717	1.00	35.82	BBBB
ATOM	7190	CB	ILE	B	451	-19.355	102.502	50.909	1.00	35.37	BBBB
ATOM	7191	CG2	ILE	B	451	-18.562	101.217	51.025	1.00	33.64	BBBB
ATOM	7192	CG1	ILE	B	451	-20.762	102.237	51.446	1.00	35.31	BBBB
ATOM	7193	CD1	ILE	B	451	-21.769	103.270	51.049	1.00	35.52	BBBB
ATOM	7194	C	ILE	B	451	-17.253	103.812	51.205	1.00	35.96	BBBB
ATOM	7195	O	ILE	B	451	-16.972	104.699	50.408	1.00	36.94	BBBB

ATOM	7196	N	ASN	B	452	-16.357	102.977	51.696	1.00	35.73	BBBB
ATOM	7197	CA	ASN	B	452	-14.972	103.006	51.289	1.00	35.00	BBBB
ATOM	7198	CB	ASN	B	452	-14.093	102.862	52.526	1.00	37.09	BBBB
ATOM	7199	CG	ASN	B	452	-12.625	103.032	52.226	1.00	38.60	BBBB
ATOM	7200	OD1	ASN	B	452	-12.081	102.391	51.326	1.00	41.20	BBBB
ATOM	7201	ND2	ASN	B	452	-11.965	103.893	52.992	1.00	39.24	BBBB
ATOM	7202	C	ASN	B	452	-14.832	101.780	50.391	1.00	35.00	BBBB
ATOM	7203	O	ASN	B	452	-14.292	100.759	50.815	1.00	35.38	BBBB
ATOM	7204	N	TRP	B	453	-15.340	101.874	49.161	1.00	33.57	BBBB
ATOM	7205	CA	TRP	B	453	-15.289	100.758	48.218	1.00	31.55	BBBB
ATOM	7206	CB	TRP	B	453	-15.794	101.185	46.842	1.00	29.63	BBBB
ATOM	7207	CG	TRP	B	453	-17.202	101.709	46.816	1.00	28.02	BBBB
ATOM	7208	CD2	TRP	B	453	-18.404	100.941	46.693	1.00	24.78	BBBB
ATOM	7209	CE2	TRP	B	453	-19.477	101.852	46.670	1.00	24.38	BBBB
ATOM	7210	CE3	TRP	B	453	-18.676	99.577	46.599	1.00	24.07	BBBB
ATOM	7211	CD1	TRP	B	453	-17.589	103.015	46.867	1.00	26.58	BBBB
ATOM	7212	NE1	TRP	B	453	-18.950	103.109	46.776	1.00	24.26	BBBB
ATOM	7213	CZ2	TRP	B	453	-20.810	101.439	46.558	1.00	24.81	BBBB
ATOM	7214	CZ3	TRP	B	453	-20.006	99.165	46.487	1.00	25.37	BBBB
ATOM	7215	CH2	TRP	B	453	-21.051	100.093	46.466	1.00	24.79	BBBB
ATOM	7216	C	TRP	B	453	-13.891	100.167	48.082	1.00	31.62	BBBB
ATOM	7217	O	TRP	B	453	-13.737	98.952	48.010	1.00	31.43	BBBB
ATOM	7218	N	LYS	B	454	-12.873	101.021	48.046	1.00	30.95	BBBB
ATOM	7219	CA	LYS	B	454	-11.501	100.539	47.936	1.00	31.92	BBBB
ATOM	7220	CB	LYS	B	454	-10.502	101.662	48.238	1.00	30.58	BBBB
ATOM	7221	CG	LYS	B	454	-9.046	101.262	48.101	1.00	28.94	BBBB
ATOM	7222	CD	LYS	B	454	-8.712	100.835	46.681	0.01	29.06	BBBB
ATOM	7223	CE	LYS	B	454	-7.260	100.398	46.563	0.01	28.90	BBBB
ATOM	7224	NZ	LYS	B	454	-6.316	101.485	46.943	0.01	28.78	BBBB
ATOM	7225	C	LYS	B	454	-11.319	99.412	48.942	1.00	32.90	BBBB
ATOM	7226	O	LYS	B	454	-10.498	98.517	48.749	1.00	32.05	BBBB
ATOM	7227	N	LYS	B	455	-12.099	99.474	50.017	1.00	33.95	BBBB
ATOM	7228	CA	LYS	B	455	-12.056	98.473	51.071	1.00	35.50	BBBB
ATOM	7229	CB	LYS	B	455	-12.637	99.044	52.366	1.00	34.41	BBBB
ATOM	7230	CG	LYS	B	455	-11.758	100.076	53.071	0.01	34.56	BBBB
ATOM	7231	CD	LYS	B	455	-10.541	99.449	53.751	0.01	34.33	BBBB
ATOM	7232	CE	LYS	B	455	-9.478	99.008	52.754	0.01	34.22	BBBB
ATOM	7233	NZ	LYS	B	455	-8.975	100.149	51.940	0.01	34.35	BBBB
ATOM	7234	C	LYS	B	455	-12.814	97.219	50.666	1.00	37.23	BBBB
ATOM	7235	O	LYS	B	455	-12.440	96.116	51.042	1.00	37.65	BBBB
ATOM	7236	N	LEU	B	456	-13.882	97.386	49.898	1.00	39.40	BBBB
ATOM	7237	CA	LEU	B	456	-14.658	96.244	49.444	1.00	40.83	BBBB
ATOM	7238	CB	LEU	B	456	-16.012	96.702	48.925	1.00	41.03	BBBB
ATOM	7239	CG	LEU	B	456	-17.023	97.181	49.959	1.00	42.71	BBBB
ATOM	7240	CD1	LEU	B	456	-18.222	97.767	49.251	1.00	43.97	BBBB
ATOM	7241	CD2	LEU	B	456	-17.458	96.032	50.830	1.00	43.20	BBBB
ATOM	7242	C	LEU	B	456	-13.925	95.501	48.331	1.00	42.10	BBBB
ATOM	7243	O	LEU	B	456	-14.173	94.315	48.106	1.00	43.20	BBBB
ATOM	7244	N	PHE	B	457	-13.014	96.202	47.652	1.00	42.09	BBBB
ATOM	7245	CA	PHE	B	457	-12.251	95.652	46.527	1.00	41.92	BBBB
ATOM	7246	CB	PHE	B	457	-11.651	96.796	45.708	1.00	41.18	BBBB
ATOM	7247	CG	PHE	B	457	-12.680	97.762	45.169	1.00	42.68	BBBB
ATOM	7248	CD1	PHE	B	457	-13.963	97.317	44.811	1.00	43.30	BBBB
ATOM	7249	CD2	PHE	B	457	-12.364	99.103	44.984	1.00	41.97	BBBB
ATOM	7250	CE1	PHE	B	457	-14.904	98.191	44.281	1.00	42.03	BBBB
ATOM	7251	CE2	PHE	B	457	-13.302	99.985	44.452	1.00	43.23	BBBB
ATOM	7252	CZ	PHE	B	457	-14.575	99.529	44.100	1.00	43.01	BBBB
ATOM	7253	C	PHE	B	457	-11.159	94.643	46.856	1.00	42.98	BBBB
ATOM	7254	O	PHE	B	457	-10.793	94.458	48.018	1.00	43.50	BBBB
ATOM	7255	N	GLY	B	458	-10.643	93.990	45.818	1.00	43.71	BBBB
ATOM	7256	CA	GLY	B	458	-9.611	92.991	46.016	1.00	44.83	BBBB
ATOM	7257	C	GLY	B	458	-8.892	92.507	44.766	1.00	46.53	BBBB
ATOM	7258	O	GLY	B	458	-8.417	91.364	44.725	1.00	46.79	BBBB
ATOM	7259	N	THR	B	459	-8.807	93.376	43.756	1.00	46.97	BBBB
ATOM	7260	CA	THR	B	459	-8.130	93.078	42.493	1.00	47.72	BBBB
ATOM	7261	CB	THR	B	459	-9.144	92.607	41.418	1.00	47.92	BBBB
ATOM	7262	OG1	THR	B	459	-9.513	91.246	41.681	1.00	45.45	BBBB
ATOM	7263	CG2	THR	B	459	-8.551	92.700	40.019	1.00	46.62	BBBB
ATOM	7264	C	THR	B	459	-7.382	94.331	42.019	1.00	48.74	BBBB
ATOM	7265	O	THR	B	459	-7.615	95.421	42.531	1.00	48.80	BBBB
ATOM	7266	N	SER	B	460	-6.476	94.176	41.060	1.00	49.77	BBBB
ATOM	7267	CA	SER	B	460	-5.694	95.304	40.559	1.00	50.40	BBBB
ATOM	7268	CB	SER	B	460	-4.447	94.803	39.812	1.00	51.85	BBBB
ATOM	7269	OG	SER	B	460	-4.761	94.309	38.511	1.00	51.21	BBBB
ATOM	7270	C	SER	B	460	-6.475	96.228	39.630	1.00	50.41	BBBB

ATOM	7271	O	SER	B	460	-6.924	95.806	38.562	1.00	52.20	BBBB
ATOM	7272	N	GLY	B	461	-6.630	97.489	40.027	1.00	48.50	BBBB
ATOM	7273	CA	GLY	B	461	-7.335	98.437	39.181	1.00	45.73	BBBB
ATOM	7274	C	GLY	B	461	-8.777	98.736	39.548	1.00	43.89	BBBB
ATOM	7275	O	GLY	B	461	-9.413	99.594	38.935	1.00	43.99	BBBB
ATOM	7276	N	GLN	B	462	-9.308	98.030	40.533	1.00	40.89	BBBB
ATOM	7277	CA	GLN	B	462	-10.673	98.274	40.956	1.00	38.78	BBBB
ATOM	7278	CB	GLN	B	462	-10.934	97.548	42.271	1.00	39.35	BBBB
ATOM	7279	CG	GLN	B	462	-9.695	97.364	43.142	0.01	39.36	BBBB
ATOM	7280	CD	GLN	B	462	-9.009	98.670	43.488	0.01	39.51	BBBB
ATOM	7281	OE1	GLN	B	462	-9.588	99.535	44.144	0.01	39.49	BBBB
ATOM	7282	NE2	GLN	B	462	-7.765	98.819	43.047	0.01	39.49	BBBB
ATOM	7283	C	GLN	B	462	-10.923	99.772	41.111	1.00	37.17	BBBB
ATOM	7284	O	GLN	B	462	-10.219	100.450	41.847	1.00	35.20	BBBB
ATOM	7285	N	LYS	B	463	-11.921	100.277	40.391	1.00	36.69	BBBB
ATOM	7286	CA	LYS	B	463	-12.278	101.692	40.426	1.00	36.37	BBBB
ATOM	7287	CB	LYS	B	463	-11.784	102.402	39.164	1.00	34.77	BBBB
ATOM	7288	CG	LYS	B	463	-12.063	103.896	39.137	0.01	34.98	BBBB
ATOM	7289	CD	LYS	B	463	-11.488	104.549	37.888	0.01	34.66	BBBB
ATOM	7290	CE	LYS	B	463	-9.973	104.419	37.836	0.01	34.66	BBBB
ATOM	7291	NZ	LYS	B	463	-9.402	105.059	36.619	0.01	34.42	BBBB
ATOM	7292	C	LYS	B	463	-13.788	101.856	40.546	1.00	36.89	BBBB
ATOM	7293	O	LYS	B	463	-14.557	100.999	40.098	1.00	37.14	BBBB
ATOM	7294	N	THR	B	464	-14.203	102.965	41.151	1.00	37.08	BBBB
ATOM	7295	CA	THR	B	464	-15.611	103.257	41.364	1.00	36.95	BBBB
ATOM	7296	CB	THR	B	464	-15.848	103.662	42.826	1.00	37.60	BBBB
ATOM	7297	OG1	THR	B	464	-17.072	103.090	43.288	1.00	38.18	BBBB
ATOM	7298	CG2	THR	B	464	-15.917	105.183	42.963	1.00	36.79	BBBB
ATOM	7299	C	THR	B	464	-16.057	104.396	40.455	1.00	37.30	BBBB
ATOM	7300	O	THR	B	464	-15.241	105.209	40.039	1.00	38.09	BBBB
ATOM	7301	N	LYS	B	465	-17.353	104.463	40.161	1.00	38.22	BBBB
ATOM	7302	CA	LYS	B	465	-17.891	105.509	39.289	1.00	38.36	BBBB
ATOM	7303	CB	LYS	B	465	-18.053	104.965	37.857	1.00	39.95	BBBB
ATOM	7304	CG	LYS	B	465	-18.039	106.033	36.749	1.00	41.88	BBBB
ATOM	7305	CD	LYS	B	465	-18.310	105.423	35.371	1.00	43.75	BBBB
ATOM	7306	CE	LYS	B	465	-17.861	106.324	34.209	1.00	44.01	BBBB
ATOM	7307	NZ	LYS	B	465	-18.687	107.552	34.011	1.00	46.40	BBBB
ATOM	7308	C	LYS	B	465	-19.232	106.049	39.780	1.00	36.47	BBBB
ATOM	7309	O	LYS	B	465	-20.247	105.893	39.114	1.00	37.08	BBBB
ATOM	7310	N	ILE	B	466	-19.241	106.686	40.943	1.00	34.78	BBBB
ATOM	7311	CA	ILE	B	466	-20.483	107.236	41.482	1.00	33.64	BBBB
ATOM	7312	CB	ILE	B	466	-20.401	107.397	43.010	1.00	31.85	BBBB
ATOM	7313	CG2	ILE	B	466	-21.516	108.292	43.506	1.00	32.53	BBBB
ATOM	7314	CG1	ILE	B	466	-20.455	106.028	43.679	1.00	30.71	BBBB
ATOM	7315	CD1	ILE	B	466	-19.171	105.267	43.601	1.00	30.02	BBBB
ATOM	7316	C	ILE	B	466	-20.746	108.598	40.846	1.00	33.54	BBBB
ATOM	7317	O	ILE	B	466	-19.817	109.383	40.674	1.00	35.53	BBBB
ATOM	7318	N	ILE	B	467	-21.998	108.881	40.494	1.00	31.91	BBBB
ATOM	7319	CA	ILE	B	467	-22.329	110.158	39.862	1.00	30.02	BBBB
ATOM	7320	CB	ILE	B	467	-21.443	110.392	38.605	1.00	29.30	BBBB
ATOM	7321	CG2	ILE	B	467	-21.790	109.375	37.527	0.01	29.16	BBBB
ATOM	7322	CG1	ILE	B	467	-21.628	111.816	38.074	0.01	29.15	BBBB
ATOM	7323	CD1	ILE	B	467	-21.202	112.898	39.046	0.01	28.95	BBBB
ATOM	7324	C	ILE	B	467	-23.798	110.250	39.438	1.00	29.92	BBBB
ATOM	7325	O	ILE	B	467	-24.532	109.259	39.423	1.00	29.72	BBBB
ATOM	7326	N	SER	B	468	-24.220	111.458	39.094	1.00	29.03	BBBB
ATOM	7327	CA	SER	B	468	-25.577	111.687	38.647	1.00	28.85	BBBB
ATOM	7328	CB	SER	B	468	-25.759	111.133	37.243	1.00	30.42	BBBB
ATOM	7329	OG	SER	B	468	-24.871	111.748	36.330	1.00	32.85	BBBB
ATOM	7330	C	SER	B	468	-26.622	111.082	39.558	1.00	28.94	BBBB
ATOM	7331	O	SER	B	468	-27.595	110.513	39.097	1.00	27.78	BBBB
ATOM	7332	N	ASN	B	469	-26.410	111.196	40.860	1.00	31.21	BBBB
ATOM	7333	CA	ASN	B	469	-27.367	110.698	41.839	1.00	33.27	BBBB
ATOM	7334	CB	ASN	B	469	-26.672	109.751	42.819	1.00	36.29	BBBB
ATOM	7335	CG	ASN	B	469	-26.175	108.462	42.148	1.00	38.11	BBBB
ATOM	7336	OD1	ASN	B	469	-26.962	107.659	41.632	1.00	37.75	BBBB
ATOM	7337	ND2	ASN	B	469	-24.864	108.265	42.165	1.00	37.89	BBBB
ATOM	7338	C	ASN	B	469	-27.904	111.958	42.531	1.00	33.93	BBBB
ATOM	7339	O	ASN	B	469	-28.022	112.992	41.870	1.00	35.48	BBBB
ATOM	7340	N	ARG	B	470	-28.231	111.922	43.821	1.00	32.97	BBBB
ATOM	7341	CA	ARG	B	470	-28.740	113.144	44.442	1.00	32.69	BBBB
ATOM	7342	CB	ARG	B	470	-29.642	112.841	45.636	1.00	31.81	BBBB
ATOM	7343	CG	ARG	B	470	-31.112	113.054	45.334	1.00	31.29	BBBB
ATOM	7344	CD	ARG	B	470	-31.958	113.101	46.597	1.00	31.41	BBBB
ATOM	7345	NE	ARG	B	470	-31.861	114.389	47.278	1.00	31.56	BBBB

ATOM	7346	CZ	ARG	B	470	-32.283	114.621	48.519	1.00	31.62	BBBB
ATOM	7347	NH1	ARG	B	470	-32.837	113.657	49.235	1.00	31.88	BBBB
ATOM	7348	NH2	ARG	B	470	-32.143	115.823	49.051	1.00	31.24	BBBB
ATOM	7349	C	ARG	B	470	-27.676	114.147	44.870	1.00	33.35	BBBB
ATOM	7350	O	ARG	B	470	-28.003	115.196	45.408	1.00	34.56	BBBB
ATOM	7351	N	GLY	B	471	-26.410	113.832	44.638	1.00	33.13	BBBB
ATOM	7352	CA	GLY	B	471	-25.348	114.755	44.996	1.00	32.68	BBBB
ATOM	7353	C	GLY	B	471	-25.324	115.229	46.438	1.00	33.32	BBBB
ATOM	7354	O	GLY	B	471	-26.351	115.558	47.021	1.00	31.72	BBBB
ATOM	7355	N	GLU	B	472	-24.120	115.284	46.992	1.00	34.83	BBBB
ATOM	7356	CA	GLU	B	472	-23.874	115.701	48.367	1.00	37.16	BBBB
ATOM	7357	CB	GLU	B	472	-22.382	115.961	48.551	1.00	39.98	BBBB
ATOM	7358	CG	GLU	B	472	-21.496	114.711	48.468	1.00	43.83	BBBB
ATOM	7359	CD	GLU	B	472	-21.575	113.849	49.715	1.00	45.30	BBBB
ATOM	7360	OE1	GLU	B	472	-21.479	114.407	50.831	1.00	46.03	BBBB
ATOM	7361	OE2	GLU	B	472	-21.722	112.614	49.579	1.00	47.38	BBBB
ATOM	7362	C	GLU	B	472	-24.651	116.911	48.876	1.00	37.33	BBBB
ATOM	7363	O	GLU	B	472	-25.623	116.773	49.614	1.00	37.84	BBBB
ATOM	7364	N	ASN	B	473	-24.199	118.099	48.504	1.00	37.28	BBBB
ATOM	7365	CA	ASN	B	473	-24.845	119.328	48.930	1.00	37.64	BBBB
ATOM	7366	CB	ASN	B	473	-24.560	120.439	47.927	1.00	38.44	BBBB
ATOM	7367	CG	ASN	B	473	-23.134	120.917	47.979	1.00	39.22	BBBB
ATOM	7368	OD1	ASN	B	473	-22.596	121.411	46.989	1.00	39.07	BBBB
ATOM	7369	ND2	ASN	B	473	-22.511	120.784	49.143	1.00	42.02	BBBB
ATOM	7370	C	ASN	B	473	-26.349	119.201	49.102	1.00	38.22	BBBB
ATOM	7371	O	ASN	B	473	-26.910	119.686	50.072	1.00	39.67	BBBB
ATOM	7372	N	SER	B	474	-27.011	118.538	48.168	1.00	38.47	BBBB
ATOM	7373	CA	SER	B	474	-28.453	118.421	48.256	1.00	37.94	BBBB
ATOM	7374	CB	SER	B	474	-29.036	118.029	46.903	1.00	36.70	BBBB
ATOM	7375	OG	SER	B	474	-30.438	117.885	46.999	1.00	34.47	BBBB
ATOM	7376	C	SER	B	474	-28.998	117.477	49.311	1.00	39.01	BBBB
ATOM	7377	O	SER	B	474	-29.994	117.793	49.952	1.00	39.02	BBBB
ATOM	7378	N	CYS	B	475	-28.364	116.326	49.512	1.00	41.21	BBBB
ATOM	7379	CA	CYS	B	475	-28.916	115.385	50.482	1.00	42.39	BBBB
ATOM	7380	C	CYS	B	475	-28.646	115.696	51.952	1.00	41.27	BBBB
ATOM	7381	O	CYS	B	475	-29.451	115.330	52.803	1.00	41.24	BBBB
ATOM	7382	CB	CYS	B	475	-28.533	113.913	50.156	1.00	43.92	BBBB
ATOM	7383	SG	CYS	B	475	-29.808	112.804	50.873	1.00	50.19	BBBB
ATOM	7384	N	LYS	B	476	-27.542	116.364	52.274	1.00	40.50	BBBB
ATOM	7385	CA	LYS	B	476	-27.305	116.695	53.677	1.00	40.26	BBBB
ATOM	7386	CB	LYS	B	476	-25.831	116.995	53.938	1.00	39.18	BBBB
ATOM	7387	CG	LYS	B	476	-25.200	117.966	52.992	1.00	40.60	BBBB
ATOM	7388	CD	LYS	B	476	-23.686	117.984	53.175	1.00	40.35	BBBB
ATOM	7389	CE	LYS	B	476	-23.290	118.425	54.570	1.00	39.46	BBBB
ATOM	7390	NZ	LYS	B	476	-21.816	118.564	54.677	1.00	40.02	BBBB
ATOM	7391	C	LYS	B	476	-28.192	117.883	54.053	1.00	40.86	BBBB
ATOM	7392	O	LYS	B	476	-28.713	117.962	55.165	1.00	40.18	BBBB
ATOM	7393	N	ALA	B	477	-28.382	118.795	53.109	1.00	41.02	BBBB
ATOM	7394	CA	ALA	B	477	-29.248	119.938	53.335	1.00	41.45	BBBB
ATOM	7395	CB	ALA	B	477	-29.270	120.819	52.108	1.00	41.47	BBBB
ATOM	7396	C	ALA	B	477	-30.654	119.408	53.629	1.00	41.73	BBBB
ATOM	7397	O	ALA	B	477	-31.476	120.085	54.244	1.00	41.69	BBBB
ATOM	7398	N	THR	B	478	-30.933	118.193	53.175	1.00	42.47	BBBB
ATOM	7399	CA	THR	B	478	-32.232	117.583	53.419	1.00	44.15	BBBB
ATOM	7400	CB	THR	B	478	-32.735	116.814	52.199	1.00	44.60	BBBB
ATOM	7401	OG1	THR	B	478	-31.858	115.717	51.927	1.00	46.79	BBBB
ATOM	7402	OG2	THR	B	478	-32.784	117.728	50.994	1.00	44.53	BBBB
ATOM	7403	C	THR	B	478	-32.091	116.629	54.593	1.00	44.74	BBBB
ATOM	7404	O	THR	B	478	-32.977	115.823	54.874	1.00	43.79	BBBB
ATOM	7405	N	GLY	B	479	-30.951	116.739	55.269	1.00	45.65	BBBB
ATOM	7406	CA	GLY	B	479	-30.680	115.925	56.435	1.00	47.06	BBBB
ATOM	7407	C	GLY	B	479	-30.643	114.434	56.201	1.00	48.12	BBBB
ATOM	7408	O	GLY	B	479	-31.544	113.705	56.606	1.00	48.98	BBBB
ATOM	7409	N	GLN	B	480	-29.590	113.971	55.550	1.00	48.64	BBBB
ATOM	7410	CA	GLN	B	480	-29.451	112.555	55.286	1.00	49.13	BBBB
ATOM	7411	CB	GLN	B	480	-30.226	112.155	54.030	1.00	50.18	BBBB
ATOM	7412	CG	GLN	B	480	-31.695	112.479	54.089	1.00	52.45	BBBB
ATOM	7413	CD	GLN	B	480	-32.480	111.791	53.004	1.00	54.85	BBBB
ATOM	7414	OE1	GLN	B	480	-33.704	111.927	52.930	1.00	56.03	BBBB
ATOM	7415	NE2	GLN	B	480	-31.783	111.041	52.150	1.00	54.70	BBBB
ATOM	7416	C	GLN	B	480	-27.993	112.196	55.116	1.00	48.48	BBBB
ATOM	7417	O	GLN	B	480	-27.426	112.306	54.026	1.00	47.80	BBBB
ATOM	7418	N	VAL	B	481	-27.381	111.790	56.216	1.00	47.43	BBBB
ATOM	7419	CA	VAL	B	481	-25.997	111.374	56.196	1.00	47.13	BBBB
ATOM	7420	CB	VAL	B	481	-25.060	112.432	56.748	1.00	46.04	BBBB

ATOM	7421	CG1	VAL	B	481	-23.683	112.228	56.150	1.00	45.71	BBBB
ATOM	7422	CG2	VAL	B	481	-25.601	113.811	56.465	1.00	44.10	BBBB
ATOM	7423	C	VAL	B	481	-25.955	110.185	57.114	1.00	47.82	BBBB
ATOM	7424	O	VAL	B	481	-26.999	109.665	57.499	1.00	47.93	BBBB
ATOM	7425	N	CYS	B	482	-24.755	109.775	57.492	1.00	48.26	BBBB
ATOM	7426	CA	CYS	B	482	-24.588	108.625	58.361	1.00	49.53	BBBB
ATOM	7427	C	CYS	B	482	-25.005	108.869	59.822	1.00	51.36	BBBB
ATOM	7428	O	CYS	B	482	-24.264	109.463	60.608	1.00	52.04	BBBB
ATOM	7429	CB	CYS	B	482	-23.137	108.155	58.263	1.00	49.30	BBBB
ATOM	7430	SG	CYS	B	482	-22.677	107.640	56.572	1.00	47.63	BBBB
ATOM	7431	N	HIS	B	483	-26.199	108.385	60.168	1.00	52.60	BBBB
ATOM	7432	CA	HIS	B	483	-26.789	108.524	61.506	1.00	53.18	BBBB
ATOM	7433	CB	HIS	B	483	-28.030	107.624	61.607	1.00	55.04	BBBB
ATOM	7434	CG	HIS	B	483	-28.583	107.485	62.996	1.00	56.26	BBBB
ATOM	7435	CD2	HIS	B	483	-29.536	108.188	63.651	1.00	57.58	BBBB
ATOM	7436	ND1	HIS	B	483	-28.142	106.525	63.881	1.00	56.00	BBBB
ATOM	7437	CE1	HIS	B	483	-28.803	106.637	65.018	1.00	56.69	BBBB
ATOM	7438	NE2	HIS	B	483	-29.655	107.639	64.905	1.00	58.65	BBBB
ATOM	7439	C	HIS	B	483	-25.880	108.273	62.709	1.00	52.96	BBBB
ATOM	7440	O	HIS	B	483	-24.697	107.936	62.557	1.00	51.72	BBBB
ATOM	7441	N	ALA	B	484	-26.467	108.452	63.899	1.00	52.89	BBBB
ATOM	7442	CA	ALA	B	484	-25.791	108.276	65.179	1.00	52.43	BBBB
ATOM	7443	CB	ALA	B	484	-25.840	106.812	65.621	1.00	51.49	BBBB
ATOM	7444	C	ALA	B	484	-24.361	108.696	64.981	1.00	52.65	BBBB
ATOM	7445	O	ALA	B	484	-24.057	109.852	64.690	1.00	52.87	BBBB
ATOM	7446	N	LEU	B	485	-23.488	107.721	65.131	1.00	52.44	BBBB
ATOM	7447	CA	LEU	B	485	-22.084	107.927	64.933	1.00	52.03	BBBB
ATOM	7448	CB	LEU	B	485	-21.386	108.288	66.246	1.00	51.32	BBBB
ATOM	7449	CG	LEU	B	485	-21.376	107.241	67.365	0.01	51.44	BBBB
ATOM	7450	CD1	LEU	B	485	-20.489	107.727	68.499	0.01	51.37	BBBB
ATOM	7451	CD2	LEU	B	485	-22.790	106.984	67.863	0.01	51.38	BBBB
ATOM	7452	C	LEU	B	485	-21.632	106.572	64.440	1.00	52.61	BBBB
ATOM	7453	O	LEU	B	485	-22.195	105.545	64.824	1.00	52.20	BBBB
ATOM	7454	N	CYS	B	486	-20.652	106.590	63.548	1.00	52.71	BBBB
ATOM	7455	CA	CYS	B	486	-20.061	105.393	62.989	1.00	53.14	BBBB
ATOM	7456	C	CYS	B	486	-19.073	105.896	61.963	1.00	53.52	BBBB
ATOM	7457	O	CYS	B	486	-18.178	105.185	61.515	1.00	52.97	BBBB
ATOM	7458	CB	CYS	B	486	-21.136	104.472	62.384	1.00	53.26	BBBB
ATOM	7459	SG	CYS	B	486	-22.126	104.941	60.920	1.00	52.94	BBBB
ATOM	7460	N	SER	B	487	-19.241	107.177	61.664	1.00	54.60	BBBB
ATOM	7461	CA	SER	B	487	-18.427	107.937	60.728	1.00	56.06	BBBB
ATOM	7462	CB	SER	B	487	-17.615	108.993	61.501	1.00	55.71	BBBB
ATOM	7463	OG	SER	B	487	-18.457	109.847	62.254	1.00	54.15	BBBB
ATOM	7464	C	SER	B	487	-17.513	107.145	59.778	1.00	56.64	BBBB
ATOM	7465	O	SER	B	487	-17.954	106.732	58.703	1.00	57.44	BBBB
ATOM	7466	N	PRO	B	488	-16.243	106.912	60.161	1.00	56.35	BBBB
ATOM	7467	CD	PRO	B	488	-15.767	106.776	61.546	1.00	55.86	BBBB
ATOM	7468	CA	PRO	B	488	-15.360	106.165	59.254	1.00	56.84	BBBB
ATOM	7469	CB	PRO	B	488	-14.355	105.525	60.209	1.00	58.03	BBBB
ATOM	7470	CG	PRO	B	488	-15.130	105.434	61.506	1.00	57.02	BBBB
ATOM	7471	C	PRO	B	488	-16.116	105.132	58.426	1.00	57.30	BBBB
ATOM	7472	O	PRO	B	488	-16.969	104.419	58.952	1.00	58.97	BBBB
ATOM	7473	N	GLU	B	489	-15.807	105.042	57.138	1.00	56.79	BBBB
ATOM	7474	CA	GLU	B	489	-16.513	104.105	56.276	1.00	55.78	BBBB
ATOM	7475	CB	GLU	B	489	-16.303	102.666	56.747	1.00	57.96	BBBB
ATOM	7476	CG	GLU	B	489	-14.984	102.028	56.308	1.00	60.38	BBBB
ATOM	7477	CD	GLU	B	489	-13.826	102.323	57.238	1.00	60.38	BBBB
ATOM	7478	OE1	GLU	B	489	-13.624	103.510	57.565	1.00	61.19	BBBB
ATOM	7479	OE2	GLU	B	489	-13.118	101.366	57.628	1.00	59.85	BBBB
ATOM	7480	C	GLU	B	489	-17.995	104.460	56.332	1.00	54.41	BBBB
ATOM	7481	O	GLU	B	489	-18.642	104.294	57.358	1.00	53.83	BBBB
ATOM	7482	N	GLY	B	490	-18.513	104.951	55.210	1.00	53.41	BBBB
ATOM	7483	CA	GLY	B	490	-19.903	105.378	55.090	1.00	50.95	BBBB
ATOM	7484	C	GLY	B	490	-21.069	104.646	55.730	1.00	48.30	BBBB
ATOM	7485	O	GLY	B	490	-20.970	104.097	56.819	1.00	47.22	BBBB
ATOM	7486	N	CYS	B	491	-22.200	104.652	55.039	1.00	46.99	BBBB
ATOM	7487	CA	CYS	B	491	-23.397	104.009	55.562	1.00	46.34	BBBB
ATOM	7488	C	CYS	B	491	-24.369	103.641	54.471	1.00	45.23	BBBB
ATOM	7489	O	CYS	B	491	-24.888	104.512	53.800	1.00	46.17	BBBB
ATOM	7490	CB	CYS	B	491	-24.096	104.944	56.539	1.00	47.21	BBBB
ATOM	7491	SG	CYS	B	491	-24.342	106.650	55.943	1.00	45.92	BBBB
ATOM	7492	N	TRP	B	492	-24.636	102.354	54.310	1.00	44.16	BBBB
ATOM	7493	CA	TRP	B	492	-25.556	101.916	53.276	1.00	43.38	BBBB
ATOM	7494	CB	TRP	B	492	-25.624	100.386	53.226	1.00	42.95	BBBB
ATOM	7495	CG	TRP	B	492	-24.295	99.755	53.029	1.00	42.68	BBBB

ATOM	7496	CD2	TRP	B	492	-23.550	99.684	51.806	1.00	43.22	BBBB
ATOM	7497	CE2	TRP	B	492	-22.308	99.088	52.108	1.00	42.67	BBBB
ATOM	7498	CE3	TRP	B	492	-23.811	100.066	50.483	1.00	43.57	BBBB
ATOM	7499	CD1	TRP	B	492	-23.504	99.213	53.989	1.00	42.84	BBBB
ATOM	7500	NE1	TRP	B	492	-22.305	98.811	53.447	1.00	43.12	BBBB
ATOM	7501	CZ2	TRP	B	492	-21.326	98.867	51.138	1.00	42.52	BBBB
ATOM	7502	CZ3	TRP	B	492	-22.830	99.845	49.516	1.00	43.61	BBBB
ATOM	7503	CH2	TRP	B	492	-21.606	99.250	49.852	1.00	43.04	BBBB
ATOM	7504	C	TRP	B	492	-26.953	102.482	53.468	1.00	43.18	BBBB
ATOM	7505	O	TRP	B	492	-27.894	102.031	52.819	1.00	43.84	BBBB
ATOM	7506	N	GLY	B	493	-27.090	103.473	54.349	1.00	43.20	BBBB
ATOM	7507	CA	GLY	B	493	-28.400	104.066	54.591	1.00	42.29	BBBB
ATOM	7508	C	GLY	B	493	-28.531	105.018	55.775	1.00	40.66	BBBB
ATOM	7509	O	GLY	B	493	-27.545	105.364	56.422	1.00	40.09	BBBB
ATOM	7510	N	PRO	B	494	-29.762	105.457	56.077	1.00	39.63	BBBB
ATOM	7511	CD	PRO	B	494	-30.940	105.212	55.221	1.00	39.96	BBBB
ATOM	7512	CA	PRO	B	494	-30.095	106.379	57.170	1.00	38.96	BBBB
ATOM	7513	CB	PRO	B	494	-31.406	106.994	56.694	1.00	38.39	BBBB
ATOM	7514	CG	PRO	B	494	-32.074	105.832	56.022	1.00	39.31	BBBB
ATOM	7515	C	PRO	B	494	-30.212	105.761	58.575	1.00	38.58	BBBB
ATOM	7516	O	PRO	B	494	-29.689	106.322	59.543	1.00	38.75	BBBB
ATOM	7517	N	GLU	B	495	-30.920	104.630	58.676	1.00	36.66	BBBB
ATOM	7518	CA	GLU	B	495	-31.107	103.910	59.932	1.00	32.17	BBBB
ATOM	7519	CB	GLU	B	495	-31.865	102.583	59.661	1.00	29.47	BBBB
ATOM	7520	CG	GLU	B	495	-33.413	102.706	59.398	1.00	24.02	BBBB
ATOM	7521	CD	GLU	B	495	-34.130	101.349	59.125	1.00	23.08	BBBB
ATOM	7522	OE1	GLU	B	495	-35.381	101.263	59.055	1.00	19.65	BBBB
ATOM	7523	OE2	GLU	B	495	-33.433	100.348	58.965	1.00	21.80	BBBB
ATOM	7524	C	GLU	B	495	-29.678	103.680	60.474	1.00	32.90	BBBB
ATOM	7525	O	GLU	B	495	-28.705	103.775	59.714	1.00	32.12	BBBB
ATOM	7526	N	PRO	B	496	-29.523	103.411	61.792	1.00	34.05	BBBB
ATOM	7527	CD	PRO	B	496	-30.564	103.450	62.834	1.00	33.52	BBBB
ATOM	7528	CA	PRO	B	496	-28.199	103.187	62.406	1.00	33.78	BBBB
ATOM	7529	CB	PRO	B	496	-28.476	103.366	63.894	1.00	31.11	BBBB
ATOM	7530	CG	PRO	B	496	-29.841	102.859	64.018	1.00	32.88	BBBB
ATOM	7531	C	PRO	B	496	-27.451	101.881	62.107	1.00	34.21	BBBB
ATOM	7532	O	PRO	B	496	-26.215	101.880	62.059	1.00	34.46	BBBB
ATOM	7533	N	ARG	B	497	-28.173	100.778	61.902	1.00	33.76	BBBB
ATOM	7534	CA	ARG	B	497	-27.496	99.526	61.594	1.00	33.80	BBBB
ATOM	7535	CB	ARG	B	497	-28.363	98.313	61.978	1.00	34.79	BBBB
ATOM	7536	CG	ARG	B	497	-29.565	98.000	61.100	1.00	34.41	BBBB
ATOM	7537	CD	ARG	B	497	-29.388	96.639	60.420	1.00	33.97	BBBB
ATOM	7538	NE	ARG	B	497	-30.654	96.076	59.948	1.00	36.21	BBBB
ATOM	7539	CZ	ARG	B	497	-31.467	96.660	59.066	1.00	37.08	BBBB
ATOM	7540	NH1	ARG	B	497	-31.154	97.840	58.537	1.00	36.24	BBBB
ATOM	7541	NH2	ARG	B	497	-32.607	96.071	58.722	1.00	35.97	BBBB
ATOM	7542	C	ARG	B	497	-27.084	99.463	60.124	1.00	33.72	BBBB
ATOM	7543	O	ARG	B	497	-26.471	98.501	59.680	1.00	33.27	BBBB
ATOM	7544	N	ASP	B	498	-27.429	100.496	59.369	1.00	35.22	BBBB
ATOM	7545	CA	ASP	B	498	-27.045	100.562	57.970	1.00	37.84	BBBB
ATOM	7546	CB	ASP	B	498	-27.924	101.539	57.179	1.00	37.31	BBBB
ATOM	7547	CG	ASP	B	498	-29.385	101.160	57.188	1.00	39.15	BBBB
ATOM	7548	OD1	ASP	B	498	-29.692	99.974	57.424	1.00	40.35	BBBB
ATOM	7549	OD2	ASP	B	498	-30.232	102.048	56.942	1.00	38.15	BBBB
ATOM	7550	C	ASP	B	498	-25.624	101.103	58.019	1.00	40.69	BBBB
ATOM	7551	O	ASP	B	498	-25.003	101.373	56.990	1.00	42.07	BBBB
ATOM	7552	N	CYS	B	499	-25.118	101.287	59.231	1.00	42.50	BBBB
ATOM	7553	CA	CYS	B	499	-23.771	101.803	59.399	1.00	45.37	BBBB
ATOM	7554	C	CYS	B	499	-22.811	100.664	59.065	1.00	45.63	BBBB
ATOM	7555	O	CYS	B	499	-23.229	99.510	59.003	1.00	45.46	BBBB
ATOM	7556	CB	CYS	B	499	-23.565	102.267	60.844	1.00	48.00	BBBB
ATOM	7557	SG	CYS	B	499	-23.901	104.015	61.277	1.00	50.94	BBBB
ATOM	7558	N	VAL	B	500	-21.536	100.974	58.844	1.00	46.05	BBBB
ATOM	7559	CA	VAL	B	500	-20.563	99.928	58.522	1.00	47.49	BBBB
ATOM	7560	CB	VAL	B	500	-19.416	100.483	57.617	1.00	46.09	BBBB
ATOM	7561	CG1	VAL	B	500	-19.977	100.938	56.287	1.00	44.08	BBBB
ATOM	7562	CG2	VAL	B	500	-18.719	101.631	58.303	1.00	45.72	BBBB
ATOM	7563	C	VAL	B	500	-19.960	99.257	59.781	1.00	49.30	BBBB
ATOM	7564	O	VAL	B	500	-18.714	99.231	59.935	1.00	50.61	BBBB
ATOM	7565	OXT	VAL	B	500	-20.745	98.741	60.609	1.00	49.61	BBBB
ATOM	7566	CB	SER	C	3	40.468	27.169	30.883	1.00	68.63	CCCC
ATOM	7567	OG	SER	C	3	40.453	27.563	32.244	0.01	68.70	CCCC
ATOM	7568	C	SER	C	3	38.079	27.867	30.472	1.00	68.34	CCCC
ATOM	7569	O	SER	C	3	37.487	26.822	30.194	1.00	67.22	CCCC
ATOM	7570	N	SER	C	3	39.989	29.476	30.121	1.00	68.62	CCCC

ATOM	7571	CA	SER	C	3	39.542	28.055	30.040	1.00	68.76	CCCC
ATOM	7572	N	HIS	C	4	37.523	28.871	31.161	1.00	67.97	CCCC
ATOM	7573	CA	HIS	C	4	36.116	28.884	31.605	1.00	68.08	CCCC
ATOM	7574	CB	HIS	C	4	35.602	27.460	31.902	1.00	69.34	CCCC
ATOM	7575	CG	HIS	C	4	34.321	27.127	31.188	1.00	70.44	CCCC
ATOM	7576	CD2	HIS	C	4	33.073	26.886	31.657	1.00	70.59	CCCC
ATOM	7577	ND1	HIS	C	4	34.224	27.077	29.813	1.00	70.15	CCCC
ATOM	7578	CE1	HIS	C	4	32.973	26.827	29.467	1.00	69.83	CCCC
ATOM	7579	NE2	HIS	C	4	32.254	26.708	30.568	1.00	70.27	CCCC
ATOM	7580	C	HIS	C	4	35.790	29.810	32.794	1.00	66.97	CCCC
ATOM	7581	O	HIS	C	4	35.451	30.981	32.603	1.00	66.52	CCCC
ATOM	7582	N	PHE	C	5	35.877	29.293	34.016	1.00	66.06	CCCC
ATOM	7583	CA	PHE	C	5	35.574	30.109	35.192	1.00	64.18	CCCC
ATOM	7584	CB	PHE	C	5	34.305	29.588	35.875	1.00	64.16	CCCC
ATOM	7585	CG	PHE	C	5	33.052	29.767	35.060	1.00	64.16	CCCC
ATOM	7586	CD1	PHE	C	5	32.599	28.758	34.217	1.00	63.85	CCCC
ATOM	7587	CD2	PHE	C	5	32.325	30.952	35.132	1.00	63.49	CCCC
ATOM	7588	CE1	PHE	C	5	31.434	28.928	33.459	1.00	63.49	CCCC
ATOM	7589	CE2	PHE	C	5	31.167	31.128	34.381	1.00	62.44	CCCC
ATOM	7590	CZ	PHE	C	5	30.721	30.114	33.543	1.00	62.75	CCCC
ATOM	7591	C	PHE	C	5	36.706	30.184	36.224	1.00	62.95	CCCC
ATOM	7592	O	PHE	C	5	37.847	29.818	35.948	1.00	62.27	CCCC
ATOM	7593	N	ASN	C	6	36.374	30.676	37.413	1.00	61.97	CCCC
ATOM	7594	CA	ASN	C	6	37.333	30.795	38.502	1.00	61.39	CCCC
ATOM	7595	CB	ASN	C	6	38.446	31.761	38.143	1.00	62.39	CCCC
ATOM	7596	CG	ASN	C	6	39.768	31.063	37.997	1.00	63.81	CCCC
ATOM	7597	OD1	ASN	C	6	40.753	31.659	37.577	1.00	66.31	CCCC
ATOM	7598	ND2	ASN	C	6	39.800	29.782	38.351	1.00	63.97	CCCC
ATOM	7599	C	ASN	C	6	36.689	31.218	39.802	1.00	60.24	CCCC
ATOM	7600	O	ASN	C	6	35.568	31.698	39.817	1.00	59.53	CCCC
ATOM	7601	N	ASP	C	7	37.427	31.058	40.891	1.00	59.13	CCCC
ATOM	7602	CA	ASP	C	7	36.926	31.355	42.225	1.00	58.64	CCCC
ATOM	7603	CB	ASP	C	7	37.801	30.634	43.242	1.00	60.94	CCCC
ATOM	7604	CG	ASP	C	7	38.281	29.278	42.744	1.00	63.70	CCCC
ATOM	7605	OD1	ASP	C	7	37.450	28.351	42.612	1.00	65.36	CCCC
ATOM	7606	OD2	ASP	C	7	39.496	29.142	42.482	1.00	65.10	CCCC
ATOM	7607	C	ASP	C	7	36.834	32.824	42.622	1.00	57.40	CCCC
ATOM	7608	O	ASP	C	7	37.698	33.625	42.267	1.00	57.24	CCCC
ATOM	7609	N	CYS	C	8	35.774	33.174	43.355	1.00	55.14	CCCC
ATOM	7610	CA	CYS	C	8	35.605	34.539	43.851	1.00	52.22	CCCC
ATOM	7611	C	CYS	C	8	36.187	34.346	45.230	1.00	50.80	CCCC
ATOM	7612	O	CYS	C	8	35.965	33.313	45.841	1.00	50.27	CCCC
ATOM	7613	CB	CYS	C	8	34.113	34.940	43.960	1.00	51.28	CCCC
ATOM	7614	SG	CYS	C	8	33.038	33.852	42.986	1.00	49.51	CCCC
ATOM	7615	N	PRO	C	9	36.984	35.299	45.722	1.00	50.41	CCCC
ATOM	7616	CD	PRO	C	9	37.318	36.653	45.246	1.00	50.06	CCCC
ATOM	7617	CA	PRO	C	9	37.515	35.065	47.066	1.00	50.37	CCCC
ATOM	7618	CB	PRO	C	9	38.395	36.279	47.299	1.00	50.17	CCCC
ATOM	7619	CG	PRO	C	9	37.663	37.352	46.536	1.00	50.61	CCCC
ATOM	7620	C	PRO	C	9	36.339	34.995	48.040	1.00	51.03	CCCC
ATOM	7621	O	PRO	C	9	35.255	35.508	47.751	1.00	52.45	CCCC
ATOM	7622	N	ALA	C	10	36.548	34.355	49.183	1.00	50.30	CCCC
ATOM	7623	CA	ALA	C	10	35.500	34.202	50.186	1.00	48.72	CCCC
ATOM	7624	CB	ALA	C	10	35.954	33.184	51.231	1.00	49.38	CCCC
ATOM	7625	C	ALA	C	10	35.096	35.515	50.866	1.00	47.97	CCCC
ATOM	7626	O	ALA	C	10	34.941	36.555	50.220	1.00	46.64	CCCC
ATOM	7627	N	PHE	C	15	28.959	35.713	47.968	1.00	28.09	CCCC
ATOM	7628	CA	PHE	C	15	28.106	36.653	47.265	1.00	27.48	CCCC
ATOM	7629	CB	PHE	C	15	28.737	37.022	45.911	1.00	25.08	CCCC
ATOM	7630	CG	PHE	C	15	28.169	38.274	45.288	1.00	24.38	CCCC
ATOM	7631	CD1	PHE	C	15	28.261	39.498	45.943	0.01	24.35	CCCC
ATOM	7632	CD2	PHE	C	15	27.541	38.225	44.047	0.01	24.36	CCCC
ATOM	7633	CE1	PHE	C	15	27.737	40.657	45.372	0.01	24.19	CCCC
ATOM	7634	CE2	PHE	C	15	27.013	39.377	43.467	0.01	24.19	CCCC
ATOM	7635	CZ	PHE	C	15	27.111	40.596	44.131	0.01	24.12	CCCC
ATOM	7636	C	PHE	C	15	26.760	35.970	47.056	1.00	29.40	CCCC
ATOM	7637	O	PHE	C	15	25.702	36.583	47.162	1.00	30.03	CCCC
ATOM	7638	N	CYS	C	16	26.808	34.678	46.783	1.00	30.14	CCCC
ATOM	7639	CA	CYS	C	16	25.601	33.932	46.536	1.00	31.53	CCCC
ATOM	7640	C	CYS	C	16	25.038	33.298	47.779	1.00	32.56	CCCC
ATOM	7641	O	CYS	C	16	25.545	32.296	48.274	1.00	33.51	CCCC
ATOM	7642	CB	CYS	C	16	25.882	32.870	45.491	1.00	34.52	CCCC
ATOM	7643	SG	CYS	C	16	26.845	33.570	44.123	1.00	38.31	CCCC
ATOM	7644	N	PHE	C	17	23.965	33.890	48.273	1.00	32.25	CCCC
ATOM	7645	CA	PHE	C	17	23.299	33.395	49.452	1.00	31.04	CCCC

ATOM	7646	CB	PHE	C	17	22.052	34.217	49.688	1.00	31.14	CCCC
ATOM	7647	CG	PHE	C	17	22.313	35.689	49.754	1.00	31.68	CCCC
ATOM	7648	CD1	PHE	C	17	22.958	36.244	50.855	1.00	30.48	CCCC
ATOM	7649	CD2	PHE	C	17	21.920	36.526	48.705	1.00	31.89	CCCC
ATOM	7650	CE1	PHE	C	17	23.209	37.612	50.915	1.00	31.85	CCCC
ATOM	7651	CE2	PHE	C	17	22.167	37.899	48.753	1.00	31.39	CCCC
ATOM	7652	CZ	PHE	C	17	22.812	38.443	49.860	1.00	32.41	CCCC
ATOM	7653	C	PHE	C	17	22.944	31.921	49.316	1.00	31.44	CCCC
ATOM	7654	O	PHE	C	17	23.409	31.108	50.096	1.00	33.08	CCCC
ATOM	7655	N	HIS	C	18	22.134	31.562	48.328	1.00	31.83	CCCC
ATOM	7656	CA	HIS	C	18	21.749	30.157	48.156	1.00	31.99	CCCC
ATOM	7657	CB	HIS	C	18	20.241	30.036	48.283	1.00	30.55	CCCC
ATOM	7658	CG	HIS	C	18	19.722	30.582	49.569	1.00	30.79	CCCC
ATOM	7659	CD2	HIS	C	18	19.125	31.760	49.860	1.00	32.92	CCCC
ATOM	7660	ND1	HIS	C	18	19.850	29.913	50.764	1.00	31.85	CCCC
ATOM	7661	CE1	HIS	C	18	19.352	30.653	51.737	1.00	31.95	CCCC
ATOM	7662	NE2	HIS	C	18	18.904	31.780	51.215	1.00	33.38	CCCC
ATOM	7663	C	HIS	C	18	22.233	29.529	46.855	1.00	32.17	CCCC
ATOM	7664	O	HIS	C	18	21.456	29.235	45.952	1.00	32.41	CCCC
ATOM	7665	N	GLY	C	19	23.538	29.315	46.799	1.00	32.15	CCCC
ATOM	7666	CA	GLY	C	19	24.177	28.747	45.634	1.00	33.69	CCCC
ATOM	7667	C	GLY	C	19	25.649	29.100	45.722	1.00	34.63	CCCC
ATOM	7668	O	GLY	C	19	26.039	29.879	46.583	1.00	35.32	CCCC
ATOM	7669	N	THR	C	20	26.469	28.552	44.837	1.00	34.37	CCCC
ATOM	7670	CA	THR	C	20	27.893	28.828	44.880	1.00	35.44	CCCC
ATOM	7671	CB	THR	C	20	28.698	27.542	44.536	1.00	36.00	CCCC
ATOM	7672	OG1	THR	C	20	28.494	27.191	43.164	1.00	36.59	CCCC
ATOM	7673	CG2	THR	C	20	28.237	26.381	45.388	1.00	34.12	CCCC
ATOM	7674	C	THR	C	20	28.285	29.958	43.927	1.00	35.99	CCCC
ATOM	7675	O	THR	C	20	27.778	30.027	42.818	1.00	35.16	CCCC
ATOM	7676	N	CYS	C	21	29.174	30.850	44.369	1.00	37.47	CCCC
ATOM	7677	CA	CYS	C	21	29.635	31.951	43.521	1.00	39.97	CCCC
ATOM	7678	C	CYS	C	21	30.714	31.329	42.634	1.00	39.29	CCCC
ATOM	7679	O	CYS	C	21	31.274	30.276	42.967	1.00	38.76	CCCC
ATOM	7680	CB	CYS	C	21	30.310	33.083	44.327	1.00	42.93	CCCC
ATOM	7681	SG	CYS	C	21	32.092	32.711	44.382	1.00	51.71	CCCC
ATOM	7682	N	ARG	C	22	31.007	31.994	41.521	1.00	38.22	CCCC
ATOM	7683	CA	ARG	C	22	32.037	31.558	40.586	1.00	38.53	CCCC
ATOM	7684	CB	ARG	C	22	31.547	30.451	39.634	1.00	36.28	CCCC
ATOM	7685	CG	ARG	C	22	30.524	30.882	38.584	1.00	34.69	CCCC
ATOM	7686	CD	ARG	C	22	30.235	29.771	37.592	1.00	31.53	CCCC
ATOM	7687	NE	ARG	C	22	28.953	29.941	36.915	1.00	30.15	CCCC
ATOM	7688	CZ	ARG	C	22	28.467	29.085	36.024	1.00	29.47	CCCC
ATOM	7689	NH1	ARG	C	22	29.155	28.007	35.702	1.00	30.20	CCCC
ATOM	7690	NH2	ARG	C	22	27.290	29.299	35.464	1.00	29.91	CCCC
ATOM	7691	C	ARG	C	22	32.417	32.774	39.779	1.00	39.93	CCCC
ATOM	7692	O	ARG	C	22	31.575	33.387	39.128	1.00	40.37	CCCC
ATOM	7693	N	PHE	C	23	33.687	33.137	39.837	1.00	41.89	CCCC
ATOM	7694	CA	PHE	C	23	34.157	34.288	39.099	1.00	43.12	CCCC
ATOM	7695	CB	PHE	C	23	35.447	34.830	39.682	1.00	44.73	CCCC
ATOM	7696	CG	PHE	C	23	35.744	36.231	39.254	1.00	45.88	CCCC
ATOM	7697	CD1	PHE	C	23	35.140	37.302	39.899	1.00	45.83	CCCC
ATOM	7698	CD2	PHE	C	23	36.623	36.479	38.209	1.00	46.79	CCCC
ATOM	7699	CE1	PHE	C	23	35.406	38.591	39.518	1.00	47.09	CCCC
ATOM	7700	CE2	PHE	C	23	36.899	37.768	37.816	1.00	47.99	CCCC
ATOM	7701	CZ	PHE	C	23	36.289	38.830	38.473	1.00	49.21	CCCC
ATOM	7702	C	PHE	C	23	34.418	33.857	37.686	1.00	43.02	CCCC
ATOM	7703	O	PHE	C	23	34.905	32.758	37.446	1.00	43.03	CCCC
ATOM	7704	N	LEU	C	24	34.097	34.727	36.743	1.00	43.62	CCCC
ATOM	7705	CA	LEU	C	24	34.310	34.394	35.353	1.00	43.72	CCCC
ATOM	7706	CB	LEU	C	24	32.968	34.208	34.643	1.00	41.82	CCCC
ATOM	7707	CG	LEU	C	24	31.888	35.252	34.879	1.00	37.99	CCCC
ATOM	7708	CD1	LEU	C	24	31.730	36.100	33.629	1.00	37.86	CCCC
ATOM	7709	CD2	LEU	C	24	30.596	34.550	35.217	1.00	36.79	CCCC
ATOM	7710	C	LEU	C	24	35.160	35.436	34.655	1.00	44.55	CCCC
ATOM	7711	O	LEU	C	24	34.808	36.619	34.577	1.00	43.92	CCCC
ATOM	7712	N	VAL	C	25	36.309	34.966	34.182	1.00	45.31	CCCC
ATOM	7713	CA	VAL	C	25	37.269	35.783	33.468	1.00	45.23	CCCC
ATOM	7714	CB	VAL	C	25	38.403	34.899	32.952	1.00	45.40	CCCC
ATOM	7715	CG1	VAL	C	25	38.828	33.914	34.048	1.00	45.57	CCCC
ATOM	7716	CG2	VAL	C	25	37.942	34.132	31.735	1.00	45.48	CCCC
ATOM	7717	C	VAL	C	25	36.455	36.301	32.303	1.00	45.13	CCCC
ATOM	7718	O	VAL	C	25	35.396	35.751	32.017	1.00	46.74	CCCC
ATOM	7719	N	GLN	C	26	36.914	37.341	31.628	1.00	43.53	CCCC
ATOM	7720	CA	GLN	C	26	36.139	37.842	30.506	1.00	44.15	CCCC

ATOM	7721	CB	GLN	C	26	35.888	36.705	29.517	1.00	44.93	CCCC
ATOM	7722	CG	GLN	C	26	35.304	37.119	28.186	1.00	47.86	CCCC
ATOM	7723	CD	GLN	C	26	35.303	35.972	27.191	1.00	47.82	CCCC
ATOM	7724	OE1	GLN	C	26	36.337	35.348	26.947	1.00	45.96	CCCC
ATOM	7725	NE2	GLN	C	26	34.144	35.693	26.612	1.00	48.12	CCCC
ATOM	7726	C	GLN	C	26	34.817	38.366	31.047	1.00	43.63	CCCC
ATOM	7727	O	GLN	C	26	33.844	37.628	31.132	1.00	44.37	CCCC
ATOM	7728	N	GLU	C	27	34.808	39.652	31.386	1.00	43.29	CCCC
ATOM	7729	CA	GLU	C	27	33.672	40.365	31.974	1.00	42.33	CCCC
ATOM	7730	CB	GLU	C	27	32.418	39.492	32.026	1.00	41.66	CCCC
ATOM	7731	CG	GLU	C	27	31.565	39.550	30.779	1.00	41.86	CCCC
ATOM	7732	CD	GLU	C	27	30.817	40.857	30.657	1.00	42.36	CCCC
ATOM	7733	OE1	GLU	C	27	31.279	41.750	29.919	1.00	42.76	CCCC
ATOM	7734	OE2	GLU	C	27	29.760	40.992	31.308	1.00	41.83	CCCC
ATOM	7735	C	GLU	C	27	34.140	40.697	33.391	1.00	42.65	CCCC
ATOM	7736	O	GLU	C	27	33.778	41.727	33.973	1.00	42.25	CCCC
ATOM	7737	N	ASP	C	28	34.970	39.806	33.922	1.00	41.81	CCCC
ATOM	7738	CA	ASP	C	28	35.546	39.959	35.239	1.00	42.46	CCCC
ATOM	7739	CB	ASP	C	28	36.771	40.868	35.160	1.00	42.86	CCCC
ATOM	7740	CG	ASP	C	28	37.676	40.712	36.353	1.00	43.91	CCCC
ATOM	7741	OD1	ASP	C	28	37.490	41.416	37.373	1.00	44.29	CCCC
ATOM	7742	OD2	ASP	C	28	38.571	39.850	36.274	1.00	45.95	CCCC
ATOM	7743	C	ASP	C	28	34.561	40.506	36.255	1.00	42.76	CCCC
ATOM	7744	O	ASP	C	28	34.576	41.690	36.581	1.00	43.77	CCCC
ATOM	7745	N	LYS	C	29	33.698	39.627	36.744	1.00	42.62	CCCC
ATOM	7746	CA	LYS	C	29	32.692	39.975	37.735	1.00	42.39	CCCC
ATOM	7747	CB	LYS	C	29	31.422	40.518	37.077	1.00	43.18	CCCC
ATOM	7748	CG	LYS	C	29	31.547	41.804	36.289	1.00	45.25	CCCC
ATOM	7749	CD	LYS	C	29	30.199	42.100	35.634	1.00	48.61	CCCC
ATOM	7750	CE	LYS	C	29	30.248	43.248	34.620	1.00	51.19	CCCC
ATOM	7751	NZ	LYS	C	29	30.293	44.615	35.231	1.00	54.01	CCCC
ATOM	7752	C	LYS	C	29	32.336	38.670	38.417	1.00	41.89	CCCC
ATOM	7753	O	LYS	C	29	32.592	37.593	37.882	1.00	43.03	CCCC
ATOM	7754	N	PRO	C	30	31.744	38.744	39.611	1.00	40.51	CCCC
ATOM	7755	CD	PRO	C	30	31.661	39.928	40.474	1.00	39.36	CCCC
ATOM	7756	CA	PRO	C	30	31.355	37.535	40.341	1.00	40.04	CCCC
ATOM	7757	CB	PRO	C	30	31.237	38.018	41.779	1.00	39.97	CCCC
ATOM	7758	CG	PRO	C	30	31.999	39.341	41.787	1.00	40.65	CCCC
ATOM	7759	C	PRO	C	30	30.009	37.045	39.800	1.00	40.09	CCCC
ATOM	7760	O	PRO	C	30	29.214	37.836	39.290	1.00	39.78	CCCC
ATOM	7761	N	ALA	C	31	29.751	35.747	39.913	1.00	39.84	CCCC
ATOM	7762	CA	ALA	C	31	28.501	35.180	39.423	1.00	39.59	CCCC
ATOM	7763	CB	ALA	C	31	28.703	34.607	38.025	1.00	39.53	CCCC
ATOM	7764	C	ALA	C	31	28.000	34.093	40.357	1.00	39.39	CCCC
ATOM	7765	O	ALA	C	31	28.749	33.581	41.182	1.00	38.33	CCCC
ATOM	7766	N	CYS	C	32	26.729	33.737	40.220	1.00	38.58	CCCC
ATOM	7767	CA	CYS	C	32	26.159	32.699	41.062	1.00	38.54	CCCC
ATOM	7768	C	CYS	C	32	25.702	31.470	40.301	1.00	38.10	CCCC
ATOM	7769	O	CYS	C	32	25.576	31.484	39.083	1.00	39.61	CCCC
ATOM	7770	CB	CYS	C	32	24.973	33.244	41.852	1.00	39.23	CCCC
ATOM	7771	SG	CYS	C	32	25.445	34.531	43.035	1.00	39.81	CCCC
ATOM	7772	N	VAL	C	33	25.476	30.398	41.046	1.00	37.16	CCCC
ATOM	7773	CA	VAL	C	33	24.982	29.153	40.502	1.00	36.74	CCCC
ATOM	7774	CB	VAL	C	33	26.085	28.166	40.179	1.00	37.91	CCCC
ATOM	7775	CG1	VAL	C	33	25.630	27.251	39.052	1.00	38.04	CCCC
ATOM	7776	CG2	VAL	C	33	27.354	28.899	39.821	1.00	40.98	CCCC
ATOM	7777	C	VAL	C	33	24.192	28.622	41.672	1.00	36.99	CCCC
ATOM	7778	O	VAL	C	33	24.714	27.881	42.505	1.00	35.68	CCCC
ATOM	7779	N	CYS	C	34	22.932	29.050	41.724	1.00	37.63	CCCC
ATOM	7780	CA	CYS	C	34	21.982	28.706	42.772	1.00	37.29	CCCC
ATOM	7781	C	CYS	C	34	21.754	27.214	42.964	1.00	37.92	CCCC
ATOM	7782	O	CYS	C	34	21.891	26.420	42.028	1.00	38.26	CCCC
ATOM	7783	CB	CYS	C	34	20.632	29.381	42.495	1.00	36.45	CCCC
ATOM	7784	SG	CYS	C	34	20.697	31.151	42.056	1.00	34.53	CCCC
ATOM	7785	N	HIS	C	35	21.414	26.848	44.198	1.00	37.72	CCCC
ATOM	7786	CA	HIS	C	35	21.127	25.465	44.553	1.00	37.55	CCCC
ATOM	7787	CB	HIS	C	35	21.179	25.274	46.070	1.00	38.60	CCCC
ATOM	7788	CG	HIS	C	35	22.533	25.492	46.660	1.00	40.49	CCCC
ATOM	7789	CD2	HIS	C	35	23.740	24.971	46.338	1.00	42.51	CCCC
ATOM	7790	ND1	HIS	C	35	22.752	26.334	47.728	1.00	41.71	CCCC
ATOM	7791	CE1	HIS	C	35	24.035	26.321	48.042	1.00	42.66	CCCC
ATOM	7792	NE2	HIS	C	35	24.657	25.501	47.213	1.00	43.94	CCCC
ATOM	7793	C	HIS	C	35	19.714	25.224	44.067	1.00	36.66	CCCC
ATOM	7794	O	HIS	C	35	19.023	26.164	43.679	1.00	37.55	CCCC
ATOM	7795	N	SER	C	36	19.275	23.976	44.086	1.00	35.16	CCCC

ATOM	7796	CA	SER	C	36	17.932	23.688	43.632	1.00	34.25	CCCC
ATOM	7797	CB	SER	C	36	17.632	22.189	43.753	1.00	35.91	CCCC
ATOM	7798	OG	SER	C	36	16.478	21.832	43.006	1.00	37.74	CCCC
ATOM	7799	C	SER	C	36	16.946	24.502	44.460	1.00	32.49	CCCC
ATOM	7800	O	SER	C	36	17.171	24.773	45.638	1.00	32.77	CCCC
ATOM	7801	N	GLY	C	37	15.865	24.917	43.821	1.00	31.05	CCCC
ATOM	7802	CA	GLY	C	37	14.849	25.686	44.503	1.00	30.28	CCCC
ATOM	7803	C	GLY	C	37	15.137	27.160	44.710	1.00	29.12	CCCC
ATOM	7804	O	GLY	C	37	14.430	27.816	45.475	1.00	29.78	CCCC
ATOM	7805	N	TYR	C	38	16.156	27.696	44.050	1.00	26.51	CCCC
ATOM	7806	CA	TYR	C	38	16.460	29.105	44.225	1.00	25.27	CCCC
ATOM	7807	CB	TYR	C	38	17.636	29.270	45.178	1.00	24.65	CCCC
ATOM	7808	CG	TYR	C	38	17.217	29.186	46.625	1.00	25.03	CCCC
ATOM	7809	CD1	TYR	C	38	16.941	27.962	47.223	1.00	25.69	CCCC
ATOM	7810	CE1	TYR	C	38	16.536	27.895	48.545	1.00	24.56	CCCC
ATOM	7811	CD2	TYR	C	38	17.071	30.337	47.395	1.00	23.62	CCCC
ATOM	7812	CE2	TYR	C	38	16.666	30.272	48.707	1.00	21.16	CCCC
ATOM	7813	CZ	TYR	C	38	16.403	29.057	49.269	1.00	22.85	CCCC
ATOM	7814	OH	TYR	C	38	15.986	28.997	50.561	1.00	28.03	CCCC
ATOM	7815	C	TYR	C	38	16.706	29.909	42.958	1.00	24.47	CCCC
ATOM	7816	O	TYR	C	38	17.149	29.377	41.943	1.00	23.96	CCCC
ATOM	7817	N	VAL	C	39	16.419	31.204	43.035	1.00	23.22	CCCC
ATOM	7818	CA	VAL	C	39	16.587	32.089	41.903	1.00	22.54	CCCC
ATOM	7819	CB	VAL	C	39	15.304	32.173	41.108	1.00	24.28	CCCC
ATOM	7820	CG1	VAL	C	39	15.057	30.858	40.382	1.00	24.52	CCCC
ATOM	7821	CG2	VAL	C	39	14.163	32.489	42.046	1.00	24.09	CCCC
ATOM	7822	C	VAL	C	39	16.937	33.471	42.372	1.00	21.71	CCCC
ATOM	7823	O	VAL	C	39	16.728	33.784	43.524	1.00	19.43	CCCC
ATOM	7824	N	GLY	C	40	17.453	34.293	41.458	1.00	22.88	CCCC
ATOM	7825	CA	GLY	C	40	17.848	35.662	41.777	1.00	23.65	CCCC
ATOM	7826	C	GLY	C	40	19.269	35.969	41.334	1.00	23.36	CCCC
ATOM	7827	O	GLY	C	40	20.012	35.059	40.994	1.00	23.97	CCCC
ATOM	7828	N	ALA	C	41	19.666	37.235	41.331	1.00	23.51	CCCC
ATOM	7829	CA	ALA	C	41	21.028	37.568	40.918	1.00	24.55	CCCC
ATOM	7830	CB	ALA	C	41	21.191	39.045	40.777	1.00	22.88	CCCC
ATOM	7831	C	ALA	C	41	22.040	37.039	41.918	1.00	26.52	CCCC
ATOM	7832	O	ALA	C	41	23.110	36.583	41.538	1.00	26.10	CCCC
ATOM	7833	N	ARG	C	42	21.700	37.120	43.202	1.00	28.04	CCCC
ATOM	7834	CA	ARG	C	42	22.570	36.626	44.264	1.00	29.38	CCCC
ATOM	7835	CB	ARG	C	42	22.719	37.683	45.354	1.00	30.22	CCCC
ATOM	7836	CG	ARG	C	42	23.261	38.991	44.863	1.00	32.25	CCCC
ATOM	7837	CD	ARG	C	42	23.716	39.837	46.012	1.00	34.01	CCCC
ATOM	7838	NE	ARG	C	42	24.760	39.152	46.756	1.00	36.59	CCCC
ATOM	7839	CZ	ARG	C	42	25.345	39.637	47.846	1.00	39.60	CCCC
ATOM	7840	NH1	ARG	C	42	24.996	40.823	48.336	1.00	39.34	CCCC
ATOM	7841	NH2	ARG	C	42	26.282	38.928	48.455	1.00	41.46	CCCC
ATOM	7842	C	ARG	C	42	21.950	35.358	44.859	1.00	30.75	CCCC
ATOM	7843	O	ARG	C	42	22.253	34.960	45.992	1.00	29.00	CCCC
ATOM	7844	N	CYS	C	43	21.071	34.734	44.078	1.00	31.59	CCCC
ATOM	7845	CA	CYS	C	43	20.388	33.533	44.519	1.00	31.67	CCCC
ATOM	7846	C	CYS	C	43	19.691	33.851	45.845	1.00	30.47	CCCC
ATOM	7847	O	CYS	C	43	19.516	32.989	46.688	1.00	30.87	CCCC
ATOM	7848	CB	CYS	C	43	21.415	32.406	44.693	1.00	33.67	CCCC
ATOM	7849	SG	CYS	C	43	22.245	31.900	43.142	1.00	35.97	CCCC
ATOM	7850	N	GLU	C	44	19.274	35.100	46.006	1.00	28.62	CCCC
ATOM	7851	CA	GLU	C	44	18.644	35.539	47.236	1.00	27.65	CCCC
ATOM	7852	CB	GLU	C	44	18.649	37.067	47.315	1.00	27.94	CCCC
ATOM	7853	CG	GLU	C	44	17.654	37.782	46.416	1.00	27.12	CCCC
ATOM	7854	CD	GLU	C	44	18.223	38.152	45.056	1.00	29.28	CCCC
ATOM	7855	OE1	GLU	C	44	17.608	39.001	44.375	1.00	30.08	CCCC
ATOM	7856	OE2	GLU	C	44	19.274	37.609	44.666	1.00	29.15	CCCC
ATOM	7857	C	GLU	C	44	17.233	35.050	47.515	1.00	27.29	CCCC
ATOM	7858	O	GLU	C	44	16.876	34.827	48.664	1.00	26.92	CCCC
ATOM	7859	N	HIS	C	45	16.426	34.885	46.475	1.00	27.24	CCCC
ATOM	7860	CA	HIS	C	45	15.048	34.452	46.658	1.00	25.01	CCCC
ATOM	7861	CB	HIS	C	45	14.154	35.232	45.717	1.00	22.99	CCCC
ATOM	7862	CG	HIS	C	45	14.143	36.693	45.999	1.00	22.73	CCCC
ATOM	7863	CD2	HIS	C	45	14.292	37.376	47.159	1.00	23.57	CCCC
ATOM	7864	ND1	HIS	C	45	13.977	37.639	45.014	1.00	23.41	CCCC
ATOM	7865	CE1	HIS	C	45	14.028	38.844	45.555	1.00	24.15	CCCC
ATOM	7866	NE2	HIS	C	45	14.217	38.711	46.855	1.00	23.12	CCCC
ATOM	7867	C	HIS	C	45	14.730	32.972	46.531	1.00	25.75	CCCC
ATOM	7868	O	HIS	C	45	15.292	32.238	45.715	1.00	24.03	CCCC
ATOM	7869	N	ALA	C	46	13.815	32.542	47.384	1.00	26.17	CCCC
ATOM	7870	CA	ALA	C	46	13.369	31.174	47.368	1.00	27.69	CCCC

ATOM	7871	CB	ALA	C	46	12.573	30.862	48.617	1.00	26.72	CCCC
ATOM	7872	C	ALA	C	46	12.483	31.113	46.146	1.00	29.11	CCCC
ATOM	7873	O	ALA	C	46	11.818	32.088	45.796	1.00	28.88	CCCC
ATOM	7874	N	ASP	C	47	12.497	29.971	45.482	1.00	31.39	CCCC
ATOM	7875	CA	ASP	C	47	11.698	29.788	44.297	1.00	31.85	CCCC
ATOM	7876	CB	ASP	C	47	12.383	28.824	43.349	1.00	34.50	CCCC
ATOM	7877	CG	ASP	C	47	11.510	28.474	42.189	1.00	40.36	CCCC
ATOM	7878	OD1	ASP	C	47	11.914	27.640	41.348	1.00	43.44	CCCC
ATOM	7879	OD2	ASP	C	47	10.403	29.050	42.121	1.00	42.78	CCCC
ATOM	7880	C	ASP	C	47	10.343	29.242	44.686	1.00	31.94	CCCC
ATOM	7881	O	ASP	C	47	10.051	28.079	44.438	1.00	31.72	CCCC
ATOM	7882	N	LEU	C	48	9.530	30.099	45.300	1.00	33.00	CCCC
ATOM	7883	CA	LEU	C	48	8.172	29.782	45.763	1.00	31.94	CCCC
ATOM	7884	CB	LEU	C	48	7.446	31.070	46.134	1.00	30.16	CCCC
ATOM	7885	CG	LEU	C	48	8.121	32.029	47.111	1.00	28.75	CCCC
ATOM	7886	CD1	LEU	C	48	7.561	33.427	46.906	1.00	27.01	CCCC
ATOM	7887	CD2	LEU	C	48	7.923	31.536	48.543	1.00	27.60	CCCC
ATOM	7888	C	LEU	C	48	7.332	29.044	44.726	1.00	33.31	CCCC
ATOM	7889	O	LEU	C	48	6.376	28.351	45.075	1.00	31.57	CCCC
ATOM	7890	N	LEU	C	49	7.674	29.226	43.448	1.00	36.09	CCCC
ATOM	7891	CA	LEU	C	49	6.960	28.557	42.354	1.00	37.20	CCCC
ATOM	7892	CB	LEU	C	49	7.205	29.265	41.017	1.00	36.37	CCCC
ATOM	7893	CG	LEU	C	49	6.324	30.471	40.690	1.00	37.51	CCCC
ATOM	7894	CD1	LEU	C	49	6.568	30.873	39.235	1.00	36.96	CCCC
ATOM	7895	CD2	LEU	C	49	4.843	30.119	40.905	1.00	37.77	CCCC
ATOM	7896	C	LEU	C	49	7.360	27.092	42.226	1.00	37.37	CCCC
ATOM	7897	O	LEU	C	49	7.446	26.553	41.127	1.00	36.40	CCCC
ATOM	7898	N	ALA	C	50	7.611	26.463	43.368	1.00	38.35	CCCC
ATOM	7899	CA	ALA	C	50	7.986	25.059	43.407	1.00	38.78	CCCC
ATOM	7900	CB	ALA	C	50	9.505	24.911	43.383	1.00	37.49	CCCC
ATOM	7901	C	ALA	C	50	7.417	24.441	44.673	1.00	39.15	CCCC
ATOM	7902	O	ALA	C	50	7.352	25.135	45.718	1.00	37.51	CCCC
ATOM	7903	OXT	ALA	C	50	7.048	23.254	44.591	1.00	41.05	CCCC
ATOM	7904	CB	ALA	D	4	-34.635	102.058	2.839	1.00	61.86	DDDD
ATOM	7905	C	ALA	D	4	-36.531	101.517	4.378	1.00	62.84	DDDD
ATOM	7906	O	ALA	D	4	-36.008	100.445	4.700	1.00	62.68	DDDD
ATOM	7907	N	ALA	D	4	-36.461	103.671	3.206	1.00	63.00	DDDD
ATOM	7908	CA	ALA	D	4	-36.128	102.228	3.094	1.00	62.57	DDDD
ATOM	7909	N	PHE	D	5	-37.470	102.121	5.105	1.00	63.32	DDDD
ATOM	7910	CA	PHE	D	5	-37.959	101.563	6.365	1.00	64.01	DDDD
ATOM	7911	CB	PHE	D	5	-37.182	102.157	7.550	1.00	63.94	DDDD
ATOM	7912	CG	PHE	D	5	-35.772	102.552	7.216	1.00	62.91	DDDD
ATOM	7913	CD1	PHE	D	5	-35.507	103.778	6.624	1.00	62.30	DDDD
ATOM	7914	CD2	PHE	D	5	-34.720	101.676	7.444	1.00	62.24	DDDD
ATOM	7915	CE1	PHE	D	5	-34.218	104.127	6.260	1.00	62.37	DDDD
ATOM	7916	CE2	PHE	D	5	-33.423	102.016	7.081	1.00	61.91	DDDD
ATOM	7917	CZ	PHE	D	5	-33.172	103.245	6.486	1.00	61.97	DDDD
ATOM	7918	C	PHE	D	5	-39.438	101.865	6.555	1.00	64.50	DDDD
ATOM	7919	O	PHE	D	5	-39.823	103.023	6.647	1.00	65.23	DDDD
ATOM	7920	N	ASN	D	6	-40.273	100.836	6.619	1.00	65.73	DDDD
ATOM	7921	CA	ASN	D	6	-41.700	101.068	6.820	1.00	67.62	DDDD
ATOM	7922	CB	ASN	D	6	-42.522	100.103	5.968	1.00	68.77	DDDD
ATOM	7923	CG	ASN	D	6	-43.923	100.624	5.683	1.00	69.99	DDDD
ATOM	7924	OD1	ASN	D	6	-44.605	101.150	6.569	1.00	70.33	DDDD
ATOM	7925	ND2	ASN	D	6	-44.364	100.468	4.440	1.00	70.38	DDDD
ATOM	7926	C	ASN	D	6	-42.067	100.891	8.300	1.00	68.31	DDDD
ATOM	7927	O	ASN	D	6	-41.369	100.200	9.042	1.00	69.04	DDDD
ATOM	7928	N	ASP	D	7	-43.167	101.506	8.725	1.00	68.38	DDDD
ATOM	7929	CA	ASP	D	7	-43.607	101.419	10.117	1.00	68.66	DDDD
ATOM	7930	CB	ASP	D	7	-44.863	102.265	10.305	1.00	70.42	DDDD
ATOM	7931	CG	ASP	D	7	-44.844	103.524	9.447	1.00	72.69	DDDD
ATOM	7932	OD1	ASP	D	7	-43.782	104.185	9.372	1.00	73.23	DDDD
ATOM	7933	OD2	ASP	D	7	-45.893	103.854	8.849	1.00	73.84	DDDD
ATOM	7934	C	ASP	D	7	-43.875	99.977	10.546	1.00	67.69	DDDD
ATOM	7935	O	ASP	D	7	-44.813	99.348	10.073	1.00	67.62	DDDD
ATOM	7936	N	CYS	D	8	-43.048	99.469	11.456	1.00	66.50	DDDD
ATOM	7937	CA	CYS	D	8	-43.160	98.100	11.952	1.00	65.12	DDDD
ATOM	7938	C	CYS	D	8	-44.548	97.710	12.428	1.00	65.18	DDDD
ATOM	7939	O	CYS	D	8	-45.294	98.534	12.945	1.00	66.13	DDDD
ATOM	7940	CB	CYS	D	8	-42.217	97.868	13.138	1.00	63.66	DDDD
ATOM	7941	SG	CYS	D	8	-40.463	98.320	12.933	1.00	62.59	DDDD
ATOM	7942	N	PRO	D	9	-44.915	96.437	12.239	1.00	65.35	DDDD
ATOM	7943	CD	PRO	D	9	-44.298	95.621	11.175	1.00	65.79	DDDD
ATOM	7944	CA	PRO	D	9	-46.199	95.854	12.648	1.00	65.24	DDDD
ATOM	7945	CB	PRO	D	9	-46.528	94.929	11.490	1.00	65.60	DDDD

ATOM	7946	CG	PRO	D	9	-45.182	94.383	11.142	1.00	65.58	DDDD
ATOM	7947	C	PRO	D	9	-45.887	95.077	13.937	1.00	64.73	DDDD
ATOM	7948	O	PRO	D	9	-44.818	94.480	14.049	1.00	65.69	DDDD
ATOM	7949	N	ASP	D	10	-46.783	95.075	14.916	1.00	64.02	DDDD
ATOM	7950	CA	ASP	D	10	-46.477	94.357	16.154	1.00	63.35	DDDD
ATOM	7951	CB	ASP	D	10	-46.805	95.227	17.374	1.00	63.52	DDDD
ATOM	7952	CG	ASP	D	10	-45.791	96.346	17.587	1.00	63.84	DDDD
ATOM	7953	OD1	ASP	D	10	-44.598	96.019	17.786	1.00	63.84	DDDD
ATOM	7954	OD2	ASP	D	10	-46.182	97.540	17.556	1.00	62.22	DDDD
ATOM	7955	C	ASP	D	10	-47.166	93.010	16.278	1.00	62.32	DDDD
ATOM	7956	O	ASP	D	10	-46.501	91.988	16.434	1.00	61.69	DDDD
ATOM	7957	N	ALA	D	14	-44.083	96.155	21.358	1.00	40.28	DDDD
ATOM	7958	CA	ALA	D	14	-43.042	96.118	22.371	1.00	41.63	DDDD
ATOM	7959	CB	ALA	D	14	-43.189	94.860	23.211	1.00	42.81	DDDD
ATOM	7960	C	ALA	D	14	-41.643	96.173	21.762	1.00	41.94	DDDD
ATOM	7961	O	ALA	D	14	-41.107	97.251	21.494	1.00	42.01	DDDD
ATOM	7962	N	PHE	D	15	-41.065	94.995	21.555	1.00	41.96	DDDD
ATOM	7963	CA	PHE	D	15	-39.724	94.823	20.987	1.00	42.51	DDDD
ATOM	7964	CB	PHE	D	15	-39.780	94.825	19.457	1.00	40.47	DDDD
ATOM	7965	CG	PHE	D	15	-38.576	94.194	18.824	1.00	40.12	DDDD
ATOM	7966	CD1	PHE	D	15	-38.268	92.861	19.076	1.00	38.87	DDDD
ATOM	7967	CD2	PHE	D	15	-37.730	94.931	18.008	1.00	39.81	DDDD
ATOM	7968	CE1	PHE	D	15	-37.138	92.273	18.530	1.00	38.70	DDDD
ATOM	7969	CE2	PHE	D	15	-36.593	94.346	17.454	1.00	39.66	DDDD
ATOM	7970	CZ	PHE	D	15	-36.298	93.015	17.718	1.00	38.40	DDDD
ATOM	7971	C	PHE	D	15	-38.629	95.799	21.454	1.00	42.76	DDDD
ATOM	7972	O	PHE	D	15	-37.955	95.545	22.449	1.00	41.63	DDDD
ATOM	7973	N	CYS	D	16	-38.439	96.897	20.727	1.00	43.11	DDDD
ATOM	7974	CA	CYS	D	16	-37.422	97.882	21.092	1.00	43.09	DDDD
ATOM	7975	C	CYS	D	16	-37.726	98.509	22.433	1.00	43.17	DDDD
ATOM	7976	O	CYS	D	16	-38.712	99.223	22.579	1.00	45.16	DDDD
ATOM	7977	CB	CYS	D	16	-37.358	98.988	20.053	1.00	42.41	DDDD
ATOM	7978	SG	CYS	D	16	-37.161	98.348	18.378	1.00	43.90	DDDD
ATOM	7979	N	PHE	D	17	-36.872	98.264	23.412	1.00	42.34	DDDD
ATOM	7980	CA	PHE	D	17	-37.103	98.821	24.728	1.00	41.62	DDDD
ATOM	7981	CB	PHE	D	17	-36.285	98.051	25.775	1.00	41.58	DDDD
ATOM	7982	CG	PHE	D	17	-36.744	96.619	25.987	1.00	40.76	DDDD
ATOM	7983	CD1	PHE	D	17	-38.086	96.329	26.243	1.00	39.81	DDDD
ATOM	7984	CD2	PHE	D	17	-35.832	95.564	25.936	1.00	40.59	DDDD
ATOM	7985	CE1	PHE	D	17	-38.512	95.016	26.440	1.00	38.28	DDDD
ATOM	7986	CE2	PHE	D	17	-36.252	94.244	26.134	1.00	39.10	DDDD
ATOM	7987	CZ	PHE	D	17	-37.592	93.974	26.384	1.00	38.60	DDDD
ATOM	7988	C	PHE	D	17	-36.806	100.318	24.801	1.00	41.40	DDDD
ATOM	7989	O	PHE	D	17	-37.700	101.107	25.066	1.00	41.86	DDDD
ATOM	7990	N	HIS	D	18	-35.567	100.713	24.534	1.00	41.60	DDDD
ATOM	7991	CA	HIS	D	18	-35.184	102.119	24.618	1.00	42.59	DDDD
ATOM	7992	CB	HIS	D	18	-33.978	102.247	25.544	1.00	42.71	DDDD
ATOM	7993	CG	HIS	D	18	-34.236	101.740	26.930	1.00	43.56	DDDD
ATOM	7994	CD2	HIS	D	18	-33.924	100.563	27.521	1.00	43.57	DDDD
ATOM	7995	ND1	HIS	D	18	-34.946	102.461	27.865	1.00	42.66	DDDD
ATOM	7996	CE1	HIS	D	18	-35.061	101.751	28.972	1.00	42.75	DDDD
ATOM	7997	NE2	HIS	D	18	-34.450	100.594	28.790	1.00	43.73	DDDD
ATOM	7998	C	HIS	D	18	-34.890	102.784	23.277	1.00	43.84	DDDD
ATOM	7999	O	HIS	D	18	-33.864	103.442	23.093	1.00	44.67	DDDD
ATOM	8000	N	GLY	D	19	-35.813	102.628	22.343	1.00	44.22	DDDD
ATOM	8001	CA	GLY	D	19	-35.634	103.206	21.030	1.00	43.28	DDDD
ATOM	8002	C	GLY	D	19	-36.934	103.050	20.289	1.00	43.79	DDDD
ATOM	8003	O	GLY	D	19	-37.987	102.953	20.912	1.00	43.84	DDDD
ATOM	8004	N	THR	D	20	-36.867	103.003	18.965	1.00	44.66	DDDD
ATOM	8005	CA	THR	D	20	-38.066	102.864	18.152	1.00	45.46	DDDD
ATOM	8006	CB	THR	D	20	-38.465	104.226	17.574	1.00	44.39	DDDD
ATOM	8007	OG1	THR	D	20	-37.393	104.734	16.775	1.00	41.89	DDDD
ATOM	8008	CG2	THR	D	20	-38.748	105.216	18.703	1.00	43.43	DDDD
ATOM	8009	C	THR	D	20	-37.820	101.870	17.020	1.00	47.01	DDDD
ATOM	8010	O	THR	D	20	-36.707	101.798	16.496	1.00	47.29	DDDD
ATOM	8011	N	CYS	D	21	-38.851	101.106	16.653	1.00	48.39	DDDD
ATOM	8012	CA	CYS	D	21	-38.733	100.108	15.585	1.00	49.96	DDDD
ATOM	8013	C	CYS	D	21	-39.003	100.634	14.173	1.00	49.48	DDDD
ATOM	8014	O	CYS	D	21	-39.941	101.393	13.938	1.00	49.79	DDDD
ATOM	8015	CB	CYS	D	21	-39.671	98.925	15.842	1.00	52.62	DDDD
ATOM	8016	SG	CYS	D	21	-39.564	97.579	14.602	1.00	58.10	DDDD
ATOM	8017	N	ARG	D	22	-38.162	100.202	13.240	1.00	48.61	DDDD
ATOM	8018	CA	ARG	D	22	-38.259	100.555	11.830	1.00	47.71	DDDD
ATOM	8019	CB	ARG	D	22	-37.055	101.399	11.404	1.00	46.79	DDDD
ATOM	8020	CG	ARG	D	22	-35.745	100.840	11.927	1.00	46.29	DDDD

ATOM	8021	CD	ARG	D	22	-34.539	101.149	11.055	1.00	45.60	DDDD
ATOM	8022	NE	ARG	D	22	-34.302	102.572	10.840	1.00	44.90	DDDD
ATOM	8023	CZ	ARG	D	22	-33.104	103.094	10.585	1.00	44.97	DDDD
ATOM	8024	NH1	ARG	D	22	-32.032	102.312	10.527	1.00	42.98	DDDD
ATOM	8025	NH2	ARG	D	22	-32.978	104.395	10.357	1.00	44.24	DDDD
ATOM	8026	C	ARG	D	22	-38.207	99.220	11.101	1.00	47.71	DDDD
ATOM	8027	O	ARG	D	22	-37.901	98.194	11.703	1.00	47.94	DDDD
ATOM	8028	N	PHE	D	23	-38.512	99.219	9.813	1.00	47.84	DDDD
ATOM	8029	CA	PHE	D	23	-38.450	97.984	9.052	1.00	47.77	DDDD
ATOM	8030	CB	PHE	D	23	-39.808	97.623	8.448	1.00	46.28	DDDD
ATOM	8031	CG	PHE	D	23	-39.903	96.191	8.005	1.00	45.15	DDDD
ATOM	8032	CD1	PHE	D	23	-40.294	95.196	8.899	1.00	43.70	DDDD
ATOM	8033	CD2	PHE	D	23	-39.552	95.822	6.708	1.00	44.63	DDDD
ATOM	8034	CE1	PHE	D	23	-40.332	93.856	8.510	1.00	42.41	DDDD
ATOM	8035	CE2	PHE	D	23	-39.587	94.477	6.310	1.00	42.96	DDDD
ATOM	8036	CZ	PHE	D	23	-39.977	93.497	7.217	1.00	42.08	DDDD
ATOM	8037	C	PHE	D	23	-37.448	98.159	7.932	1.00	48.84	DDDD
ATOM	8038	O	PHE	D	23	-37.792	98.651	6.862	1.00	50.27	DDDD
ATOM	8039	N	LEU	D	24	-36.200	97.786	8.186	1.00	49.34	DDDD
ATOM	8040	CA	LEU	D	24	-35.172	97.878	7.167	1.00	48.95	DDDD
ATOM	8041	CB	LEU	D	24	-33.896	97.197	7.666	1.00	48.24	DDDD
ATOM	8042	CG	LEU	D	24	-33.287	97.708	8.974	0.01	48.39	DDDD
ATOM	8043	CD1	LEU	D	24	-32.131	96.809	9.383	0.01	48.28	DDDD
ATOM	8044	CD2	LEU	D	24	-32.815	99.141	8.801	0.01	48.29	DDDD
ATOM	8045	C	LEU	D	24	-35.789	97.078	6.031	1.00	49.23	DDDD
ATOM	8046	O	LEU	D	24	-36.053	95.893	6.199	1.00	49.32	DDDD
ATOM	8047	N	VAL	D	25	-36.053	97.697	4.885	1.00	49.83	DDDD
ATOM	8048	CA	VAL	D	25	-36.675	96.921	3.816	1.00	50.80	DDDD
ATOM	8049	CB	VAL	D	25	-37.599	97.770	2.922	1.00	51.13	DDDD
ATOM	8050	CG1	VAL	D	25	-38.602	96.852	2.244	1.00	50.38	DDDD
ATOM	8051	CG2	VAL	D	25	-38.321	98.830	3.744	1.00	51.29	DDDD
ATOM	8052	C	VAL	D	25	-35.686	96.186	2.924	1.00	50.84	DDDD
ATOM	8053	O	VAL	D	25	-36.064	95.233	2.239	1.00	50.72	DDDD
ATOM	8054	N	GLN	D	26	-34.430	96.626	2.915	1.00	50.88	DDDD
ATOM	8055	CA	GLN	D	26	-33.417	95.939	2.122	1.00	51.87	DDDD
ATOM	8056	CB	GLN	D	26	-32.011	96.382	2.541	1.00	52.86	DDDD
ATOM	8057	CG	GLN	D	26	-31.933	97.807	3.095	1.00	55.11	DDDD
ATOM	8058	CD	GLN	D	26	-31.212	98.792	2.174	1.00	56.21	DDDD
ATOM	8059	OE1	GLN	D	26	-30.065	98.577	1.783	1.00	55.67	DDDD
ATOM	8060	NE2	GLN	D	26	-31.883	99.887	1.841	1.00	56.99	DDDD
ATOM	8061	C	GLN	D	26	-33.643	94.468	2.496	1.00	52.24	DDDD
ATOM	8062	O	GLN	D	26	-33.760	93.601	1.628	1.00	51.59	DDDD
ATOM	8063	N	GLU	D	27	-33.717	94.212	3.805	1.00	52.42	DDDD
ATOM	8064	CA	GLU	D	27	-33.985	92.874	4.344	1.00	51.75	DDDD
ATOM	8065	CB	GLU	D	27	-33.163	92.590	5.609	1.00	50.37	DDDD
ATOM	8066	CG	GLU	D	27	-31.826	91.906	5.389	1.00	48.88	DDDD
ATOM	8067	CD	GLU	D	27	-30.773	92.846	4.844	1.00	49.77	DDDD
ATOM	8068	OE1	GLU	D	27	-31.076	94.048	4.697	1.00	50.48	DDDD
ATOM	8069	OE2	GLU	D	27	-29.644	92.388	4.565	1.00	49.08	DDDD
ATOM	8070	C	GLU	D	27	-35.458	92.813	4.724	1.00	51.86	DDDD
ATOM	8071	O	GLU	D	27	-36.161	93.824	4.701	1.00	51.53	DDDD
ATOM	8072	N	ASP	D	28	-35.924	91.618	5.068	1.00	52.50	DDDD
ATOM	8073	CA	ASP	D	28	-37.309	91.427	5.492	1.00	52.19	DDDD
ATOM	8074	CB	ASP	D	28	-37.918	90.168	4.851	1.00	51.93	DDDD
ATOM	8075	CG	ASP	D	28	-37.902	90.219	3.336	0.01	51.88	DDDD
ATOM	8076	OD1	ASP	D	28	-38.522	91.140	2.764	0.01	51.81	DDDD
ATOM	8077	OD2	ASP	D	28	-37.268	89.338	2.718	0.01	51.82	DDDD
ATOM	8078	C	ASP	D	28	-37.204	91.259	7.004	1.00	51.14	DDDD
ATOM	8079	O	ASP	D	28	-37.816	90.362	7.597	1.00	51.65	DDDD
ATOM	8080	N	LYS	D	29	-36.404	92.137	7.608	1.00	48.84	DDDD
ATOM	8081	CA	LYS	D	29	-36.156	92.127	9.045	1.00	46.35	DDDD
ATOM	8082	CB	LYS	D	29	-34.702	91.718	9.320	1.00	46.60	DDDD
ATOM	8083	CG	LYS	D	29	-34.319	91.704	10.794	0.01	46.46	DDDD
ATOM	8084	CD	LYS	D	29	-32.837	91.406	10.984	0.01	46.58	DDDD
ATOM	8085	CE	LYS	D	29	-32.467	90.030	10.451	0.01	46.67	DDDD
ATOM	8086	NZ	LYS	D	29	-33.210	88.948	11.152	0.01	46.80	DDDD
ATOM	8087	C	LYS	D	29	-36.415	93.471	9.712	1.00	43.97	DDDD
ATOM	8088	O	LYS	D	29	-36.127	94.528	9.150	1.00	44.60	DDDD
ATOM	8089	N	PRO	D	30	-36.999	93.445	10.916	1.00	41.36	DDDD
ATOM	8090	CD	PRO	D	30	-37.856	92.349	11.393	1.00	39.54	DDDD
ATOM	8091	CA	PRO	D	30	-37.277	94.677	11.653	1.00	38.54	DDDD
ATOM	8092	CB	PRO	D	30	-38.602	94.370	12.324	1.00	37.64	DDDD
ATOM	8093	CG	PRO	D	30	-38.488	92.940	12.618	1.00	37.84	DDDD
ATOM	8094	C	PRO	D	30	-36.126	94.905	12.640	1.00	36.91	DDDD
ATOM	8095	O	PRO	D	30	-35.395	93.969	12.971	1.00	36.27	DDDD

ATOM	8096	N	ALA	D	31	-35.954	96.142	13.089	1.00	35.67	DDDD
ATOM	8097	CA	ALA	D	31	-34.869	96.476	14.013	1.00	35.77	DDDD
ATOM	8098	CB	ALA	D	31	-33.565	96.666	13.242	1.00	34.21	DDDD
ATOM	8099	C	ALA	D	31	-35.188	97.734	14.810	1.00	35.92	DDDD
ATOM	8100	O	ALA	D	31	-36.335	98.160	14.853	1.00	36.68	DDDD
ATOM	8101	N	CYS	D	32	-34.177	98.332	15.434	1.00	36.16	DDDD
ATOM	8102	CA	CYS	D	32	-34.392	99.536	16.236	1.00	36.62	DDDD
ATOM	8103	C	CYS	D	32	-33.398	100.652	15.984	1.00	36.20	DDDD
ATOM	8104	O	CYS	D	32	-32.479	100.539	15.171	1.00	35.91	DDDD
ATOM	8105	CB	CYS	D	32	-34.322	99.234	17.739	1.00	36.93	DDDD
ATOM	8106	SG	CYS	D	32	-35.216	97.773	18.330	1.00	42.60	DDDD
ATOM	8107	N	VAL	D	33	-33.629	101.730	16.726	1.00	35.75	DDDD
ATOM	8108	CA	VAL	D	33	-32.819	102.940	16.756	1.00	35.21	DDDD
ATOM	8109	CB	VAL	D	33	-33.410	104.071	15.896	1.00	35.72	DDDD
ATOM	8110	CG1	VAL	D	33	-32.801	104.057	14.503	1.00	35.48	DDDD
ATOM	8111	CG2	VAL	D	33	-34.906	103.912	15.819	1.00	37.35	DDDD
ATOM	8112	C	VAL	D	33	-32.989	103.300	18.219	1.00	34.62	DDDD
ATOM	8113	O	VAL	D	33	-34.069	103.732	18.626	1.00	34.06	DDDD
ATOM	8114	N	CYS	D	34	-31.931	103.084	19.002	1.00	34.70	DDDD
ATOM	8115	CA	CYS	D	34	-31.926	103.335	20.448	1.00	33.77	DDDD
ATOM	8116	C	CYS	D	34	-31.918	104.804	20.842	1.00	33.43	DDDD
ATOM	8117	O	CYS	D	34	-31.354	105.659	20.139	1.00	31.72	DDDD
ATOM	8118	CB	CYS	D	34	-30.701	102.688	21.115	1.00	33.56	DDDD
ATOM	8119	SG	CYS	D	34	-30.381	100.940	20.736	1.00	33.50	DDDD
ATOM	8120	N	HIS	D	35	-32.539	105.090	21.982	1.00	31.99	DDDD
ATOM	8121	CA	HIS	D	35	-32.550	106.441	22.490	1.00	32.77	DDDD
ATOM	8122	CB	HIS	D	35	-33.501	106.560	23.665	1.00	34.97	DDDD
ATOM	8123	CG	HIS	D	35	-34.930	106.346	23.301	1.00	39.32	DDDD
ATOM	8124	CD2	HIS	D	35	-35.508	106.023	22.123	1.00	41.13	DDDD
ATOM	8125	ND1	HIS	D	35	-35.956	106.465	24.212	1.00	43.75	DDDD
ATOM	8126	CE1	HIS	D	35	-37.108	106.224	23.611	1.00	43.98	DDDD
ATOM	8127	NE2	HIS	D	35	-36.863	105.953	22.341	1.00	44.15	DDDD
ATOM	8128	C	HIS	D	35	-31.131	106.678	22.960	1.00	32.22	DDDD
ATOM	8129	O	HIS	D	35	-30.410	105.727	23.264	1.00	32.25	DDDD
ATOM	8130	N	SER	D	36	-30.719	107.936	23.018	1.00	31.14	DDDD
ATOM	8131	CA	SER	D	36	-29.372	108.243	23.464	1.00	29.16	DDDD
ATOM	8132	CB	SER	D	36	-29.211	109.750	23.623	1.00	29.95	DDDD
ATOM	8133	OG	SER	D	36	-27.855	110.097	23.816	1.00	31.04	DDDD
ATOM	8134	C	SER	D	36	-29.135	107.542	24.797	1.00	27.97	DDDD
ATOM	8135	O	SER	D	36	-30.012	107.514	25.657	1.00	27.13	DDDD
ATOM	8136	N	GLY	D	37	-27.958	106.950	24.951	1.00	27.14	DDDD
ATOM	8137	CA	GLY	D	37	-27.638	106.263	26.189	1.00	28.35	DDDD
ATOM	8138	C	GLY	D	37	-27.936	104.770	26.274	1.00	28.35	DDDD
ATOM	8139	O	GLY	D	37	-27.751	104.155	27.326	1.00	27.32	DDDD
ATOM	8140	N	TYR	D	38	-28.407	104.174	25.188	1.00	27.68	DDDD
ATOM	8141	CA	TYR	D	38	-28.691	102.755	25.232	1.00	27.89	DDDD
ATOM	8142	CB	TYR	D	38	-30.206	102.518	25.330	1.00	26.58	DDDD
ATOM	8143	CG	TYR	D	38	-30.758	102.986	26.653	1.00	24.39	DDDD
ATOM	8144	CD1	TYR	D	38	-30.986	104.336	26.891	1.00	22.06	DDDD
ATOM	8145	CE1	TYR	D	38	-31.384	104.786	28.134	1.00	20.76	DDDD
ATOM	8146	CD2	TYR	D	38	-30.956	102.087	27.705	1.00	23.77	DDDD
ATOM	8147	CE2	TYR	D	38	-31.360	102.530	28.961	1.00	21.70	DDDD
ATOM	8148	CZ	TYR	D	38	-31.566	103.885	29.167	1.00	21.27	DDDD
ATOM	8149	OH	TYR	D	38	-31.911	104.346	30.414	1.00	22.54	DDDD
ATOM	8150	C	TYR	D	38	-28.080	102.000	24.059	1.00	28.60	DDDD
ATOM	8151	O	TYR	D	38	-27.771	102.594	23.016	1.00	28.76	DDDD
ATOM	8152	N	VAL	D	39	-27.901	100.693	24.254	1.00	27.32	DDDD
ATOM	8153	CA	VAL	D	39	-27.308	99.825	23.256	1.00	26.07	DDDD
ATOM	8154	CB	VAL	D	39	-25.839	99.539	23.577	1.00	25.40	DDDD
ATOM	8155	CG1	VAL	D	39	-25.055	100.832	23.614	1.00	22.22	DDDD
ATOM	8156	CG2	VAL	D	39	-25.739	98.821	24.914	1.00	24.10	DDDD
ATOM	8157	C	VAL	D	39	-28.031	98.501	23.206	1.00	26.30	DDDD
ATOM	8158	O	VAL	D	39	-29.021	98.298	23.886	1.00	26.19	DDDD
ATOM	8159	N	GLY	D	40	-27.509	97.597	22.387	1.00	28.19	DDDD
ATOM	8160	CA	GLY	D	40	-28.103	96.278	22.227	1.00	28.49	DDDD
ATOM	8161	C	GLY	D	40	-28.930	96.163	20.963	1.00	26.73	DDDD
ATOM	8162	O	GLY	D	40	-29.371	97.167	20.419	1.00	25.74	DDDD
ATOM	8163	N	ALA	D	41	-29.130	94.944	20.484	1.00	25.85	DDDD
ATOM	8164	CA	ALA	D	41	-29.944	94.752	19.299	1.00	25.30	DDDD
ATOM	8165	CB	ALA	D	41	-30.054	93.300	18.976	1.00	23.83	DDDD
ATOM	8166	C	ALA	D	41	-31.330	95.337	19.578	1.00	26.55	DDDD
ATOM	8167	O	ALA	D	41	-31.809	96.182	18.825	1.00	27.74	DDDD
ATOM	8168	N	ARG	D	42	-31.970	94.905	20.663	1.00	25.08	DDDD
ATOM	8169	CA	ARG	D	42	-33.289	95.421	21.006	1.00	24.69	DDDD
ATOM	8170	CB	ARG	D	42	-34.101	94.358	21.737	1.00	25.09	DDDD

ATOM	8171	CG	ARG	D	42	-34.511	93.171	20.885	1.00	25.75	DDDD
ATOM	8172	CD	ARG	D	42	-35.414	92.230	21.667	1.00	23.97	DDDD
ATOM	8173	NE	ARG	D	42	-36.649	92.893	22.075	1.00	25.02	DDDD
ATOM	8174	CZ	ARG	D	42	-37.610	92.322	22.788	1.00	24.10	DDDD
ATOM	8175	NH1	ARG	D	42	-37.499	91.065	23.183	1.00	24.72	DDDD
ATOM	8176	NH2	ARG	D	42	-38.682	93.013	23.115	1.00	23.56	DDDD
ATOM	8177	C	ARG	D	42	-33.225	96.675	21.872	1.00	26.60	DDDD
ATOM	8178	O	ARG	D	42	-34.244	97.093	22.429	1.00	26.32	DDDD
ATOM	8179	N	CYS	D	43	-32.029	97.261	21.994	1.00	27.93	DDDD
ATOM	8180	CA	CYS	D	43	-31.803	98.483	22.788	1.00	28.44	DDDD
ATOM	8181	C	CYS	D	43	-32.138	98.314	24.272	1.00	28.94	DDDD
ATOM	8182	O	CYS	D	43	-32.656	99.233	24.902	1.00	29.75	DDDD
ATOM	8183	CB	CYS	D	43	-32.645	99.637	22.229	1.00	29.44	DDDD
ATOM	8184	SG	CYS	D	43	-32.236	100.163	20.535	1.00	31.89	DDDD
ATOM	8185	N	GLU	D	44	-31.801	97.160	24.836	1.00	28.19	DDDD
ATOM	8186	CA	GLU	D	44	-32.140	96.860	26.215	1.00	27.95	DDDD
ATOM	8187	CB	GLU	D	44	-32.474	95.373	26.319	1.00	28.73	DDDD
ATOM	8188	CG	GLU	D	44	-31.318	94.396	26.078	1.00	29.74	DDDD
ATOM	8189	CD	GLU	D	44	-30.924	94.215	24.618	1.00	31.06	DDDD
ATOM	8190	OE1	GLU	D	44	-30.255	93.211	24.317	1.00	32.52	DDDD
ATOM	8191	OE2	GLU	D	44	-31.256	95.058	23.768	1.00	32.29	DDDD
ATOM	8192	C	GLU	D	44	-31.168	97.252	27.332	1.00	29.25	DDDD
ATOM	8193	O	GLU	D	44	-31.562	97.332	28.501	1.00	28.76	DDDD
ATOM	8194	N	HIS	D	45	-29.909	97.504	26.993	1.00	29.73	DDDD
ATOM	8195	CA	HIS	D	45	-28.930	97.871	28.007	1.00	30.64	DDDD
ATOM	8196	CB	HIS	D	45	-27.674	97.036	27.829	1.00	31.73	DDDD
ATOM	8197	CG	HIS	D	45	-27.876	95.590	28.125	1.00	33.35	DDDD
ATOM	8198	CD2	HIS	D	45	-28.799	94.959	28.889	1.00	33.51	DDDD
ATOM	8199	ND1	HIS	D	45	-27.056	94.607	27.617	1.00	34.47	DDDD
ATOM	8200	CE1	HIS	D	45	-27.468	93.432	28.054	1.00	35.42	DDDD
ATOM	8201	NE2	HIS	D	45	-28.523	93.619	28.828	1.00	34.84	DDDD
ATOM	8202	C	HIS	D	45	-28.545	99.342	28.066	1.00	31.24	DDDD
ATOM	8203	O	HIS	D	45	-28.915	100.141	27.216	1.00	31.92	DDDD
ATOM	8204	N	ALA	D	46	-27.790	99.691	29.096	1.00	30.56	DDDD
ATOM	8205	CA	ALA	D	46	-27.355	101.055	29.266	1.00	29.92	DDDD
ATOM	8206	CB	ALA	D	46	-27.648	101.511	30.679	1.00	28.45	DDDD
ATOM	8207	C	ALA	D	46	-25.867	101.176	28.965	1.00	30.86	DDDD
ATOM	8208	O	ALA	D	46	-25.054	100.369	29.408	1.00	30.43	DDDD
ATOM	8209	N	ASP	D	47	-25.522	102.185	28.181	1.00	32.60	DDDD
ATOM	8210	CA	ASP	D	47	-24.140	102.434	27.835	1.00	34.26	DDDD
ATOM	8211	CB	ASP	D	47	-24.059	103.631	26.890	1.00	35.61	DDDD
ATOM	8212	CG	ASP	D	47	-22.682	103.805	26.282	1.00	38.50	DDDD
ATOM	8213	OD1	ASP	D	47	-21.678	103.493	26.951	1.00	39.62	DDDD
ATOM	8214	OD2	ASP	D	47	-22.599	104.273	25.128	1.00	41.35	DDDD
ATOM	8215	C	ASP	D	47	-23.448	102.776	29.154	1.00	35.13	DDDD
ATOM	8216	O	ASP	D	47	-23.355	103.954	29.504	1.00	35.85	DDDD
ATOM	8217	N	LEU	D	48	-22.981	101.767	29.894	1.00	33.78	DDDD
ATOM	8218	CA	LEU	D	48	-22.321	102.043	31.164	1.00	32.70	DDDD
ATOM	8219	CB	LEU	D	48	-22.128	100.776	31.982	1.00	27.98	DDDD
ATOM	8220	CG	LEU	D	48	-23.359	99.958	32.347	1.00	25.69	DDDD
ATOM	8221	CD1	LEU	D	48	-22.910	98.774	33.175	1.00	21.92	DDDD
ATOM	8222	CD2	LEU	D	48	-24.362	100.801	33.096	1.00	22.85	DDDD
ATOM	8223	C	LEU	D	48	-20.968	102.649	30.899	1.00	35.66	DDDD
ATOM	8224	O	LEU	D	48	-20.608	103.679	31.471	1.00	37.32	DDDD
ATOM	8225	N	LEU	D	49	-20.219	102.011	30.011	1.00	37.42	DDDD
ATOM	8226	CA	LEU	D	49	-18.878	102.468	29.669	1.00	38.66	DDDD
ATOM	8227	CB	LEU	D	49	-18.278	101.538	28.610	1.00	39.24	DDDD
ATOM	8228	CG	LEU	D	49	-16.758	101.514	28.473	1.00	40.26	DDDD
ATOM	8229	CD1	LEU	D	49	-16.120	101.702	29.842	1.00	39.79	DDDD
ATOM	8230	CD2	LEU	D	49	-16.329	100.189	27.831	1.00	40.91	DDDD
ATOM	8231	C	LEU	D	49	-18.847	103.920	29.190	1.00	39.11	DDDD
ATOM	8232	O	LEU	D	49	-17.835	104.396	28.678	1.00	39.69	DDDD
ATOM	8233	N	ALA	D	50	-19.961	104.619	29.360	1.00	39.14	DDDD
ATOM	8234	CA	ALA	D	50	-20.053	106.011	28.970	1.00	40.27	DDDD
ATOM	8235	CB	ALA	D	50	-21.077	106.175	27.876	1.00	39.93	DDDD
ATOM	8236	C	ALA	D	50	-20.455	106.829	30.194	1.00	42.20	DDDD
ATOM	8237	O	ALA	D	50	-20.874	106.212	31.201	1.00	42.82	DDDD
ATOM	8238	OXT	ALA	D	50	-20.351	108.076	30.132	1.00	43.78	DDDD
ATOM	8239	C1	NAG	E	600	3.346	26.576	25.873	1.00	63.08	EEEE
ATOM	8240	C2	NAG	E	600	3.369	25.044	25.936	1.00	64.76	EEEE
ATOM	8241	N2	NAG	E	600	4.637	24.577	25.409	1.00	64.32	EEEE
ATOM	8242	C7	NAG	E	600	5.260	23.552	25.979	0.01	64.58	EEEE
ATOM	8243	O7	NAG	E	600	6.022	23.684	26.936	0.01	65.02	EEEE
ATOM	8244	C8	NAG	E	600	5.000	22.171	25.397	0.01	65.17	EEEE
ATOM	8245	C3	NAG	E	600	2.217	24.414	25.118	1.00	66.55	EEEE

ATOM	8246	O3	NAG	E	600	2.082	23.048	25.480	1.00	66.72	EEEE
ATOM	8247	C4	NAG	E	600	0.859	25.125	25.309	1.00	67.41	EEEE
ATOM	8248	O4	NAG	E	600	-0.054	24.706	24.261	1.00	73.16	EEEE
ATOM	8249	C5	NAG	E	600	1.064	26.643	25.227	1.00	66.32	EEEE
ATOM	8250	O5	NAG	E	600	2.043	27.056	26.197	1.00	64.73	EEEE
ATOM	8251	C6	NAG	E	600	-0.167	27.497	25.460	1.00	65.26	EEEE
ATOM	8252	O6	NAG	E	600	-1.234	27.113	24.571	1.00	62.45	EEEE
ATOM	8253	C1	FUC	E	601	-2.518	27.413	25.062	1.00	63.59	EEEE
ATOM	8254	C2	FUC	E	601	-2.770	26.805	26.466	1.00	63.41	EEEE
ATOM	8255	O2	FUC	E	601	-2.306	25.465	26.513	1.00	62.93	EEEE
ATOM	8256	C3	FUC	E	601	-2.074	27.636	27.547	1.00	63.20	EEEE
ATOM	8257	O3	FUC	E	601	-2.364	27.114	28.838	1.00	63.11	EEEE
ATOM	8258	C4	FUC	E	601	-2.554	29.080	27.435	1.00	63.80	EEEE
ATOM	8259	O4	FUC	E	601	-3.960	29.127	27.643	1.00	64.70	EEEE
ATOM	8260	C5	FUC	E	601	-2.219	29.623	26.036	1.00	63.14	EEEE
ATOM	8261	O5	FUC	E	601	-2.843	28.809	25.016	1.00	63.06	EEEE
ATOM	8262	C6	FUC	E	601	-2.694	31.050	25.824	1.00	63.04	EEEE
ATOM	8263	C1	NAG	E	602	-1.123	23.895	24.624	1.00	77.21	EEEE
ATOM	8264	C2	NAG	E	602	-2.235	23.937	23.560	1.00	79.43	EEEE
ATOM	8265	N2	NAG	E	602	-2.702	25.296	23.345	1.00	80.26	EEEE
ATOM	8266	C7	NAG	E	602	-3.773	25.539	22.588	1.00	81.30	EEEE
ATOM	8267	O7	NAG	E	602	-3.913	25.080	21.449	1.00	81.39	EEEE
ATOM	8268	C8	NAG	E	602	-4.861	26.422	23.178	1.00	81.79	EEEE
ATOM	8269	C3	NAG	E	602	-3.385	23.041	24.029	1.00	81.06	EEEE
ATOM	8270	O3	NAG	E	602	-4.404	22.990	23.040	1.00	82.29	EEEE
ATOM	8271	C4	NAG	E	602	-2.878	21.624	24.314	1.00	81.70	EEEE
ATOM	8272	O4	NAG	E	602	-3.943	20.850	24.906	1.00	82.70	EEEE
ATOM	8273	C5	NAG	E	602	-1.662	21.662	25.263	1.00	81.05	EEEE
ATOM	8274	O5	NAG	E	602	-0.647	22.553	24.752	1.00	78.79	EEEE
ATOM	8275	C6	NAG	E	602	-1.003	20.307	25.437	1.00	81.76	EEEE
ATOM	8276	O6	NAG	E	602	0.120	20.397	26.303	1.00	82.42	EEEE
ATOM	8277	C1	MAN	E	603	-4.250	19.671	24.251	1.00	84.43	EEEE
ATOM	8278	C2	MAN	E	603	-4.145	18.491	25.216	1.00	85.42	EEEE
ATOM	8279	O2	MAN	E	603	-5.011	18.690	26.330	1.00	86.52	EEEE
ATOM	8280	C3	MAN	E	603	-4.520	17.200	24.479	1.00	86.25	EEEE
ATOM	8281	O3	MAN	E	603	-4.553	16.120	25.402	1.00	87.70	EEEE
ATOM	8282	C4	MAN	E	603	-5.888	17.335	23.786	1.00	85.54	EEEE
ATOM	8283	O4	MAN	E	603	-6.111	16.206	22.950	1.00	84.69	EEEE
ATOM	8284	C5	MAN	E	603	-5.943	18.618	22.937	1.00	85.35	EEEE
ATOM	8285	O5	MAN	E	603	-5.584	19.768	23.738	1.00	84.36	EEEE
ATOM	8286	C6	MAN	E	603	-7.317	18.897	22.344	1.00	85.76	EEEE
ATOM	8287	O6	MAN	E	603	-8.254	17.876	22.669	1.00	86.26	EEEE
ATOM	8288	C1	NAG	E	620	27.632	55.426	28.414	1.00	69.68	EEEE
ATOM	8289	C2	NAG	E	620	28.912	54.972	29.133	1.00	71.11	EEEE
ATOM	8290	N2	NAG	E	620	29.600	53.991	28.318	1.00	70.40	EEEE
ATOM	8291	C7	NAG	E	620	30.928	53.943	28.310	1.00	70.33	EEEE
ATOM	8292	O7	NAG	E	620	31.626	54.815	27.789	1.00	69.88	EEEE
ATOM	8293	C8	NAG	E	620	31.581	52.741	28.977	1.00	71.08	EEEE
ATOM	8294	C3	NAG	E	620	28.605	54.378	30.511	1.00	72.85	EEEE
ATOM	8295	O3	NAG	E	620	29.823	54.153	31.213	1.00	73.12	EEEE
ATOM	8296	C4	NAG	E	620	27.717	55.332	31.315	1.00	73.73	EEEE
ATOM	8297	O4	NAG	E	620	27.348	54.734	32.548	1.00	73.23	EEEE
ATOM	8298	C5	NAG	E	620	26.467	55.687	30.510	1.00	74.20	EEEE
ATOM	8299	O5	NAG	E	620	26.856	56.295	29.254	1.00	72.73	EEEE
ATOM	8300	C6	NAG	E	620	25.579	56.683	31.258	1.00	77.17	EEEE
ATOM	8301	O6	NAG	E	620	24.735	57.415	30.340	1.00	79.04	EEEE
ATOM	8302	C1	FUC	E	621	25.275	58.672	30.017	1.00	80.24	EEEE
ATOM	8303	C2	FUC	E	621	24.642	59.198	28.724	1.00	80.63	EEEE
ATOM	8304	O2	FUC	E	621	24.754	58.219	27.700	1.00	79.45	EEEE
ATOM	8305	C3	FUC	E	621	23.169	59.531	28.983	1.00	81.18	EEEE
ATOM	8306	O3	FUC	E	621	22.560	60.028	27.798	1.00	81.07	EEEE
ATOM	8307	C4	FUC	E	621	23.066	60.567	30.116	1.00	80.91	EEEE
ATOM	8308	O4	FUC	E	621	23.639	61.806	29.710	1.00	79.97	EEEE
ATOM	8309	C5	FUC	E	621	23.779	60.045	31.378	1.00	80.47	EEEE
ATOM	8310	O5	FUC	E	621	25.138	59.634	31.075	1.00	80.31	EEEE
ATOM	8311	C6	FUC	E	621	23.871	61.111	32.454	1.00	81.14	EEEE
ATOM	8312	C1	NAG	E	650	20.995	47.355	52.975	1.00	39.69	EEEE
ATOM	8313	C2	NAG	E	650	21.191	46.736	51.616	1.00	39.58	EEEE
ATOM	8314	N2	NAG	E	650	21.896	45.480	51.765	1.00	37.17	EEEE
ATOM	8315	C7	NAG	E	650	21.234	44.328	51.760	1.00	34.64	EEEE
ATOM	8316	O7	NAG	E	650	20.019	44.242	51.950	1.00	32.02	EEEE
ATOM	8317	C8	NAG	E	650	22.059	43.082	51.494	1.00	33.58	EEEE
ATOM	8318	C3	NAG	E	650	21.994	47.706	50.766	1.00	41.62	EEEE
ATOM	8319	O3	NAG	E	650	22.100	47.188	49.446	1.00	41.28	EEEE
ATOM	8320	C4	NAG	E	650	21.311	49.086	50.732	1.00	44.85	EEEE

ATOM	8321	O4	NAG	E	650	22.194	50.057	50.140	1.00	51.20	EEEE
ATOM	8322	C5	NAG	E	650	20.897	49.575	52.129	1.00	42.23	EEEE
ATOM	8323	O5	NAG	E	650	20.204	48.534	52.848	1.00	40.85	EEEE
ATOM	8324	C6	NAG	E	650	19.949	50.764	52.045	1.00	40.87	EEEE
ATOM	8325	O6	NAG	E	650	18.588	50.357	52.031	1.00	37.93	EEEE
ATOM	8326	C1	NAG	E	651	22.092	50.201	48.767	1.00	58.07	EEEE
ATOM	8327	C2	NAG	E	651	22.546	51.592	48.362	1.00	60.82	EEEE
ATOM	8328	N2	NAG	E	651	21.739	52.586	49.043	1.00	61.05	EEEE
ATOM	8329	C7	NAG	E	651	22.132	53.056	50.223	1.00	62.43	EEEE
ATOM	8330	O7	NAG	E	651	22.490	52.325	51.143	1.00	62.46	EEEE
ATOM	8331	C8	NAG	E	651	22.146	54.564	50.413	1.00	63.07	EEEE
ATOM	8332	C3	NAG	E	651	22.400	51.711	46.846	1.00	63.52	EEEE
ATOM	8333	O3	NAG	E	651	22.885	52.966	46.410	1.00	64.41	EEEE
ATOM	8334	C4	NAG	E	651	23.167	50.596	46.124	1.00	65.17	EEEE
ATOM	8335	O4	NAG	E	651	22.815	50.640	44.730	1.00	71.18	EEEE
ATOM	8336	C5	NAG	E	651	22.803	49.213	46.702	1.00	62.45	EEEE
ATOM	8337	O5	NAG	E	651	22.928	49.215	48.139	1.00	59.89	EEEE
ATOM	8338	C6	NAG	E	651	23.677	48.079	46.194	1.00	61.54	EEEE
ATOM	8339	O6	NAG	E	651	24.548	48.506	45.158	1.00	61.52	EEEE
ATOM	8340	C1	MAN	E	652	23.830	50.878	43.818	1.00	76.95	EEEE
ATOM	8341	C2	MAN	E	652	23.311	50.612	42.411	1.00	79.82	EEEE
ATOM	8342	O2	MAN	E	652	22.190	51.446	42.147	1.00	80.25	EEEE
ATOM	8343	C3	MAN	E	652	24.420	50.889	41.395	1.00	81.93	EEEE
ATOM	8344	O3	MAN	E	652	23.887	50.776	40.059	1.00	86.43	EEEE
ATOM	8345	C4	MAN	E	652	24.999	52.290	41.589	1.00	80.44	EEEE
ATOM	8346	O4	MAN	E	652	26.159	52.427	40.785	1.00	80.06	EEEE
ATOM	8347	C5	MAN	E	652	25.364	52.548	43.059	1.00	79.37	EEEE
ATOM	8348	O5	MAN	E	652	24.243	52.249	43.924	1.00	78.08	EEEE
ATOM	8349	C6	MAN	E	652	25.733	53.995	43.289	1.00	78.98	EEEE
ATOM	8350	O6	MAN	E	652	25.951	54.664	42.055	1.00	79.18	EEEE
ATOM	8351	C1	MAN	E	653	24.165	49.604	39.333	1.00	89.37	EEEE
ATOM	8352	C2	MAN	E	653	23.547	48.355	39.998	1.00	89.99	EEEE
ATOM	8353	O2	MAN	E	653	23.284	47.357	39.023	1.00	89.77	EEEE
ATOM	8354	C3	MAN	E	653	24.435	47.775	41.113	1.00	90.42	EEEE
ATOM	8355	O3	MAN	E	653	23.984	46.469	41.439	1.00	90.84	EEEE
ATOM	8356	C4	MAN	E	653	25.915	47.711	40.714	1.00	90.37	EEEE
ATOM	8357	O4	MAN	E	653	26.697	47.394	41.856	1.00	90.30	EEEE
ATOM	8358	C5	MAN	E	653	26.384	49.048	40.139	1.00	90.34	EEEE
ATOM	8359	O5	MAN	E	653	25.552	49.429	39.028	1.00	90.42	EEEE
ATOM	8360	C6	MAN	E	653	27.811	48.988	39.623	1.00	91.14	EEEE
ATOM	8361	O6	MAN	E	653	27.849	48.711	38.228	1.00	90.99	EEEE
ATOM	8362	C1	NAG	E	660	4.986	55.813	65.817	1.00	76.82	EEEE
ATOM	8363	C2	NAG	E	660	5.852	54.872	66.680	1.00	79.66	EEEE
ATOM	8364	N2	NAG	E	660	6.912	54.279	65.884	1.00	81.51	EEEE
ATOM	8365	C7	NAG	E	660	8.183	54.620	66.094	1.00	83.46	EEEE
ATOM	8366	O7	NAG	E	660	8.630	54.907	67.208	1.00	83.00	EEEE
ATOM	8367	C8	NAG	E	660	9.100	54.650	64.880	1.00	84.57	EEEE
ATOM	8368	C3	NAG	E	660	4.982	53.771	67.293	1.00	81.36	EEEE
ATOM	8369	O3	NAG	E	660	5.773	52.930	68.125	1.00	81.07	EEEE
ATOM	8370	C4	NAG	E	660	3.887	54.443	68.111	1.00	80.97	EEEE
ATOM	8371	O4	NAG	E	660	3.075	53.466	68.791	1.00	81.45	EEEE
ATOM	8372	C5	NAG	E	660	3.037	55.336	67.197	1.00	80.01	EEEE
ATOM	8373	O5	NAG	E	660	3.874	56.345	66.575	1.00	78.08	EEEE
ATOM	8374	C6	NAG	E	660	1.935	56.078	67.949	1.00	80.66	EEEE
ATOM	8375	O6	NAG	E	660	2.382	56.450	69.277	1.00	81.56	EEEE
ATOM	8376	C1	FUC	E	661	2.162	57.809	69.529	1.00	83.01	EEEE
ATOM	8377	C2	FUC	E	661	1.515	58.025	70.915	1.00	83.27	EEEE
ATOM	8378	O2	FUC	E	661	0.523	57.034	71.137	1.00	83.08	EEEE
ATOM	8379	C3	FUC	E	661	2.535	57.975	72.062	1.00	83.42	EEEE
ATOM	8380	O3	FUC	E	661	1.919	58.429	73.261	1.00	82.46	EEEE
ATOM	8381	C4	FUC	E	661	3.755	58.847	71.754	1.00	83.51	EEEE
ATOM	8382	O4	FUC	E	661	3.377	60.219	71.739	1.00	82.94	EEEE
ATOM	8383	C5	FUC	E	661	4.337	58.444	70.395	1.00	83.10	EEEE
ATOM	8384	O5	FUC	E	661	3.338	58.606	69.364	1.00	83.72	EEEE
ATOM	8385	C6	FUC	E	661	5.535	59.285	69.993	1.00	84.09	EEEE
ATOM	8386	C1	NAG	E	662	3.409	53.339	70.130	1.00	81.79	EEEE
ATOM	8387	C2	NAG	E	662	2.169	53.283	71.016	1.00	82.25	EEEE
ATOM	8388	N2	NAG	E	662	1.303	54.416	70.752	1.00	81.79	EEEE
ATOM	8389	C7	NAG	E	662	0.247	54.265	69.955	1.00	82.12	EEEE
ATOM	8390	O7	NAG	E	662	0.328	53.787	68.819	1.00	81.04	EEEE
ATOM	8391	C8	NAG	E	662	-1.107	54.694	70.504	1.00	82.34	EEEE
ATOM	8392	C3	NAG	E	662	2.646	53.274	72.470	1.00	82.69	EEEE
ATOM	8393	O3	NAG	E	662	1.532	53.208	73.351	1.00	83.35	EEEE
ATOM	8394	C4	NAG	E	662	3.583	52.070	72.700	1.00	82.98	EEEE
ATOM	8395	O4	NAG	E	662	4.153	52.155	74.002	1.00	83.11	EEEE

ATOM	8396	C5	NAG	E	662	4.714	52.036	71.640	1.00	82.89	EEEE
ATOM	8397	O5	NAG	E	662	4.175	52.148	70.302	1.00	82.41	EEEE
ATOM	8398	C6	NAG	E	662	5.531	50.760	71.664	1.00	81.82	EEEE
ATOM	8399	O6	NAG	E	662	5.993	50.428	70.362	1.00	78.25	EEEE
ATOM	8400	C1	NAG	F	600	-7.741	106.957	19.564	1.00	55.44	FFFF
ATOM	8401	C2	NAG	F	600	-8.036	108.350	20.128	1.00	57.69	FFFF
ATOM	8402	N2	NAG	F	600	-9.082	108.998	19.363	1.00	57.74	FFFF
ATOM	8403	C7	NAG	F	600	-10.071	109.632	19.985	0.01	57.58	FFFF
ATOM	8404	O7	NAG	F	600	-11.088	109.061	20.377	0.01	58.16	FFFF
ATOM	8405	C8	NAG	F	600	-9.910	111.128	20.204	0.01	58.35	FFFF
ATOM	8406	C3	NAG	F	600	-6.769	109.205	20.102	1.00	61.23	FFFF
ATOM	8407	O3	NAG	F	600	-7.024	110.423	20.786	1.00	59.74	FFFF
ATOM	8408	C4	NAG	F	600	-5.578	108.488	20.768	1.00	64.86	FFFF
ATOM	8409	O4	NAG	F	600	-4.354	109.200	20.467	1.00	73.84	FFFF
ATOM	8410	C5	NAG	F	600	-5.441	107.033	20.276	1.00	62.65	FFFF
ATOM	8411	O5	NAG	F	600	-6.712	106.342	20.344	1.00	59.47	FFFF
ATOM	8412	C6	NAG	F	600	-4.476	106.206	21.118	1.00	62.87	FFFF
ATOM	8413	O6	NAG	F	600	-3.159	106.803	21.159	1.00	62.49	FFFF
ATOM	8414	C1	FUC	F	601	-2.346	106.338	22.218	1.00	62.89	FFFF
ATOM	8415	C2	FUC	F	601	-2.872	106.775	23.601	1.00	63.04	FFFF
ATOM	8416	O2	FUC	F	601	-3.278	108.135	23.564	1.00	62.92	FFFF
ATOM	8417	C3	FUC	F	601	-4.048	105.905	24.049	1.00	63.72	FFFF
ATOM	8418	O3	FUC	F	601	-4.429	106.257	25.372	1.00	63.69	FFFF
ATOM	8419	C4	FUC	F	601	-3.678	104.417	23.981	1.00	63.60	FFFF
ATOM	8420	O4	FUC	F	601	-2.678	104.111	24.943	1.00	64.73	FFFF
ATOM	8421	C5	FUC	F	601	-3.176	104.063	22.576	1.00	62.93	FFFF
ATOM	8422	O5	FUC	F	601	-2.080	104.930	22.179	1.00	63.26	FFFF
ATOM	8423	C6	FUC	F	601	-2.670	102.635	22.481	1.00	63.68	FFFF
ATOM	8424	C1	NAG	F	602	-3.926	110.150	21.389	1.00	80.44	FFFF
ATOM	8425	C2	NAG	F	602	-2.416	110.395	21.225	1.00	83.73	FFFF
ATOM	8426	N2	NAG	F	602	-1.689	109.240	21.734	1.00	84.84	FFFF
ATOM	8427	C7	NAG	F	602	-0.637	109.394	22.541	1.00	86.37	FFFF
ATOM	8428	O7	NAG	F	602	0.519	109.491	22.120	1.00	87.02	FFFF
ATOM	8429	C8	NAG	F	602	-0.898	109.457	24.040	1.00	86.40	FFFF
ATOM	8430	C3	NAG	F	602	-1.921	111.661	21.964	1.00	86.03	FFFF
ATOM	8431	O3	NAG	F	602	-0.722	112.114	21.345	1.00	88.19	FFFF
ATOM	8432	C4	NAG	F	602	-2.921	112.840	22.018	1.00	86.19	FFFF
ATOM	8433	O4	NAG	F	602	-2.610	113.665	23.171	1.00	86.70	FFFF
ATOM	8434	C5	NAG	F	602	-4.380	112.356	22.131	1.00	84.89	FFFF
ATOM	8435	O5	NAG	F	602	-4.648	111.354	21.139	1.00	82.07	FFFF
ATOM	8436	C6	NAG	F	602	-5.394	113.462	21.912	1.00	84.52	FFFF
ATOM	8437	O6	NAG	F	602	-6.223	113.174	20.794	1.00	83.97	FFFF
ATOM	8438	C1	MAN	F	603	-1.652	114.664	23.024	1.00	86.83	FFFF
ATOM	8439	C2	MAN	F	603	-1.783	115.674	24.164	1.00	86.47	FFFF
ATOM	8440	O2	MAN	F	603	-1.656	115.000	25.408	1.00	86.72	FFFF
ATOM	8441	C3	MAN	F	603	-0.692	116.748	24.043	1.00	86.86	FFFF
ATOM	8442	O3	MAN	F	603	-0.726	117.592	25.188	1.00	87.34	FFFF
ATOM	8443	C4	MAN	F	603	0.703	116.105	23.908	1.00	86.17	FFFF
ATOM	8444	O4	MAN	F	603	1.660	117.101	23.569	1.00	84.75	FFFF
ATOM	8445	C5	MAN	F	603	0.703	115.020	22.825	1.00	86.03	FFFF
ATOM	8446	O5	MAN	F	603	-0.349	114.062	23.074	1.00	86.77	FFFF
ATOM	8447	C6	MAN	F	603	2.001	114.249	22.788	1.00	84.99	FFFF
ATOM	8448	O6	MAN	F	603	1.891	113.045	23.530	1.00	84.93	FFFF
ATOM	8449	C1	NAG	F	620	-24.886	74.246	7.058	1.00	70.78	FFFF
ATOM	8450	C2	NAG	F	620	-25.602	72.980	6.593	1.00	72.34	FFFF
ATOM	8451	N2	NAG	F	620	-26.347	73.239	5.372	1.00	72.28	FFFF
ATOM	8452	C7	NAG	F	620	-27.678	73.250	5.372	1.00	72.47	FFFF
ATOM	8453	O7	NAG	F	620	-28.361	72.224	5.307	1.00	72.22	FFFF
ATOM	8454	C8	NAG	F	620	-28.348	74.612	5.453	1.00	72.36	FFFF
ATOM	8455	C3	NAG	F	620	-26.532	72.509	7.716	1.00	73.80	FFFF
ATOM	8456	O3	NAG	F	620	-27.126	71.267	7.357	1.00	74.59	FFFF
ATOM	8457	C4	NAG	F	620	-25.765	72.351	9.038	1.00	73.28	FFFF
ATOM	8458	O4	NAG	F	620	-26.697	72.157	10.094	1.00	73.78	FFFF
ATOM	8459	C5	NAG	F	620	-24.898	73.589	9.346	1.00	72.62	FFFF
ATOM	8460	O5	NAG	F	620	-24.095	73.941	8.205	1.00	71.49	FFFF
ATOM	8461	C6	NAG	F	620	-23.930	73.355	10.496	1.00	73.44	FFFF
ATOM	8462	O6	NAG	F	620	-22.610	73.114	10.020	1.00	71.63	FFFF
ATOM	8463	C1	NAG	F	630	-7.108	78.445	-10.335	1.00	69.07	FFFF
ATOM	8464	C2	NAG	F	630	-8.262	77.478	-10.049	1.00	70.49	FFFF
ATOM	8465	N2	NAG	F	630	-8.750	77.707	-8.699	1.00	72.02	FFFF
ATOM	8466	C7	NAG	F	630	-9.852	77.100	-8.256	1.00	73.59	FFFF
ATOM	8467	O7	NAG	F	630	-10.636	76.502	-8.998	1.00	74.08	FFFF
ATOM	8468	C8	NAG	F	630	-10.125	77.162	-6.756	1.00	73.04	FFFF
ATOM	8469	O3	NAG	F	630	-7.776	76.029	-10.208	1.00	71.39	FFFF
ATOM	8470	O3	NAG	F	630	-8.874	75.129	-10.104	1.00	72.35	FFFF

ATOM	8471	C4	NAG	F	630	-7.095	75.834	-11.564	1.00	70.84	FFFF
ATOM	8472	O4	NAG	F	630	-6.513	74.545	-11.617	1.00	71.88	FFFF
ATOM	8473	C5	NAG	F	630	-6.008	76.886	-11.784	1.00	70.74	FFFF
ATOM	8474	O5	NAG	F	630	-6.567	78.211	-11.642	1.00	70.33	FFFF
ATOM	8475	C6	NAG	F	630	-5.396	76.805	-13.176	1.00	70.29	FFFF
ATOM	8476	O6	NAG	F	630	-5.049	75.471	-13.518	1.00	67.90	FFFF
ATOM	8477	C1	NAG	F	650	-38.043	85.472	30.384	1.00	41.12	FFFF
ATOM	8478	C2	NAG	F	650	-37.172	85.947	29.232	1.00	41.59	FFFF
ATOM	8479	N2	NAG	F	650	-37.525	87.291	28.815	1.00	41.42	FFFF
ATOM	8480	C7	NAG	F	650	-36.561	88.178	28.592	1.00	43.00	FFFF
ATOM	8481	O7	NAG	F	650	-35.875	88.181	27.567	1.00	43.36	FFFF
ATOM	8482	C8	NAG	F	650	-36.300	89.207	29.683	1.00	42.83	FFFF
ATOM	8483	C3	NAG	F	650	-37.365	84.970	28.081	1.00	42.87	FFFF
ATOM	8484	O3	NAG	F	650	-36.615	85.397	26.951	1.00	41.81	FFFF
ATOM	8485	C4	NAG	F	650	-36.953	83.549	28.508	1.00	42.38	FFFF
ATOM	8486	O4	NAG	F	650	-37.343	82.603	27.478	1.00	44.09	FFFF
ATOM	8487	C5	NAG	F	650	-37.637	83.154	29.843	1.00	41.64	FFFF
ATOM	8488	O5	NAG	F	650	-37.555	84.207	30.835	1.00	41.04	FFFF
ATOM	8489	C6	NAG	F	650	-36.945	81.959	30.461	1.00	42.69	FFFF
ATOM	8490	O6	NAG	F	650	-35.562	82.219	30.684	1.00	41.62	FFFF
ATOM	8491	C1	NAG	F	651	-36.389	82.212	26.547	1.00	45.60	FFFF
ATOM	8492	C2	NAG	F	651	-36.726	80.831	25.989	1.00	46.89	FFFF
ATOM	8493	N2	NAG	F	651	-36.834	79.861	27.053	1.00	44.50	FFFF
ATOM	8494	C7	NAG	F	651	-37.980	79.768	27.709	1.00	44.94	FFFF
ATOM	8495	O7	NAG	F	651	-38.998	80.363	27.348	1.00	46.13	FFFF
ATOM	8496	C8	NAG	F	651	-38.008	78.894	28.949	1.00	43.75	FFFF
ATOM	8497	C3	NAG	F	651	-35.649	80.414	24.987	1.00	49.55	FFFF
ATOM	8498	O3	NAG	F	651	-35.990	79.167	24.401	1.00	49.84	FFFF
ATOM	8499	C4	NAG	F	651	-35.513	81.471	23.890	1.00	51.05	FFFF
ATOM	8500	O4	NAG	F	651	-34.363	81.157	23.080	1.00	56.05	FFFF
ATOM	8501	C5	NAG	F	651	-35.354	82.882	24.498	1.00	48.81	FFFF
ATOM	8502	O5	NAG	F	651	-36.394	83.153	25.468	1.00	46.13	FFFF
ATOM	8503	C6	NAG	F	651	-35.439	83.977	23.458	1.00	49.28	FFFF
ATOM	8504	O6	NAG	F	651	-34.224	84.103	22.732	1.00	50.36	FFFF
ATOM	8505	C1	MAN	F	652	-34.601	80.658	21.804	1.00	61.55	FFFF
ATOM	8506	C2	MAN	F	652	-33.418	81.033	20.891	1.00	63.25	FFFF
ATOM	8507	O2	MAN	F	652	-32.204	80.617	21.497	1.00	64.55	FFFF
ATOM	8508	C3	MAN	F	652	-33.566	80.361	19.527	1.00	64.97	FFFF
ATOM	8509	O3	MAN	F	652	-32.452	80.663	18.701	1.00	67.83	FFFF
ATOM	8510	C4	MAN	F	652	-33.669	78.858	19.729	1.00	65.65	FFFF
ATOM	8511	O4	MAN	F	652	-33.797	78.213	18.470	1.00	65.91	FFFF
ATOM	8512	C5	MAN	F	652	-34.893	78.570	20.613	1.00	65.89	FFFF
ATOM	8513	O5	MAN	F	652	-34.735	79.223	21.903	1.00	64.01	FFFF
ATOM	8514	C6	MAN	F	652	-35.108	77.082	20.869	1.00	65.63	FFFF
ATOM	8515	O6	MAN	F	652	-36.414	76.666	20.483	1.00	66.89	FFFF

APPENDIX II

REMARK Structure of the physiological dimer of EGFR residues 1-501 with TGFa

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ATOM	1	CB	ALA	A	1	-11.090	45.328	20.747	1.00101.07	AAAA
ATOM	2	C	ALA	A	1	-9.759	43.235	21.107	1.00101.64	AAAA
ATOM	3	O	ALA	A	1	-10.208	42.309	20.427	1.00101.77	AAAA
ATOM	4	N	ALA	A	1	-10.052	44.890	22.941	1.00100.56	AAAA
ATOM	5	CA	ALA	A	1	-10.697	44.255	21.757	1.00101.21	AAAA
ATOM	6	N	SER	A	2	-8.457	43.419	21.323	1.00101.43	AAAA
ATOM	7	CA	SER	A	2	-7.426	42.532	20.779	1.00100.31	AAAA
ATOM	8	CB	SER	A	2	-6.987	43.024	19.394	1.00100.53	AAAA
ATOM	9	OG	SER	A	2	-6.094	42.112	18.778	1.00100.86	AAAA
ATOM	10	C	SER	A	2	-6.237	42.532	21.749	1.00 99.42	AAAA
ATOM	11	O	SER	A	2	-5.237	43.221	21.534	1.00 99.25	AAAA
ATOM	12	N	GLU	A	3	-6.371	41.745	22.814	1.00 97.89	AAAA
ATOM	13	CA	GLU	A	3	-5.376	41.625	23.881	1.00 96.09	AAAA
ATOM	14	CB	GLU	A	3	-5.739	40.432	24.764	1.00 96.83	AAAA
ATOM	15	CG	GLU	A	3	-7.015	40.629	25.563	1.00 97.29	AAAA
ATOM	16	CD	GLU	A	3	-7.450	39.367	26.281	1.00 98.15	AAAA
ATOM	17	OE1	GLU	A	3	-6.618	38.773	27.001	1.00 97.49	AAAA
ATOM	18	OE2	GLU	A	3	-8.626	38.969	26.129	1.00 99.38	AAAA
ATOM	19	C	GLU	A	3	-3.891	41.547	23.512	1.00 94.55	AAAA
ATOM	20	O	GLU	A	3	-3.285	42.561	23.155	1.00 93.89	AAAA
ATOM	21	N	LYS	A	4	-3.325	40.342	23.640	1.00 92.20	AAAA
ATOM	22	CA	LYS	A	4	-1.910	40.032	23.371	1.00 89.71	AAAA
ATOM	23	CB	LYS	A	4	-1.094	41.289	23.036	1.00 90.43	AAAA
ATOM	24	CG	LYS	A	4	-0.757	41.461	21.561	1.00 90.37	AAAA
ATOM	25	CD	LYS	A	4	0.118	42.686	21.350	1.00 89.90	AAAA
ATOM	26	CE	LYS	A	4	0.528	42.841	19.894	1.00 91.16	AAAA
ATOM	27	NZ	LYS	A	4	-0.622	43.128	18.990	1.00 91.43	AAAA
ATOM	28	C	LYS	A	4	-1.274	39.369	24.596	1.00 87.51	AAAA
ATOM	29	O	LYS	A	4	-0.987	40.042	25.586	1.00 86.32	AAAA
ATOM	30	N	LYS	A	5	-1.055	38.056	24.515	1.00 84.78	AAAA
ATOM	31	CA	LYS	A	5	-0.449	37.276	25.595	1.00 81.65	AAAA
ATOM	32	CB	LYS	A	5	0.085	35.957	25.048	1.00 83.08	AAAA
ATOM	33	CG	LYS	A	5	-0.933	35.085	24.338	1.00 85.79	AAAA
ATOM	34	CD	LYS	A	5	-1.864	34.395	25.317	1.00 88.18	AAAA
ATOM	35	CE	LYS	A	5	-2.797	33.442	24.586	1.00 91.26	AAAA
ATOM	36	NZ	LYS	A	5	-3.784	32.781	25.497	1.00 94.01	AAAA
ATOM	37	C	LYS	A	5	0.708	38.025	26.247	1.00 79.78	AAAA
ATOM	38	O	LYS	A	5	1.742	38.238	25.616	1.00 80.18	AAAA
ATOM	39	N	VAL	A	6	0.546	38.415	27.508	1.00 76.78	AAAA
ATOM	40	CA	VAL	A	6	1.600	39.136	28.217	1.00 73.09	AAAA
ATOM	41	CB	VAL	A	6	1.065	40.414	28.883	1.00 71.62	AAAA
ATOM	42	CG1	VAL	A	6	2.216	41.234	29.425	1.00 70.25	AAAA
ATOM	43	CG2	VAL	A	6	0.259	41.219	27.892	1.00 71.85	AAAA
ATOM	44	C	VAL	A	6	2.199	38.261	29.311	1.00 71.83	AAAA
ATOM	45	O	VAL	A	6	1.539	37.347	29.810	1.00 71.17	AAAA
ATOM	46	N	CYS	A	7	3.454	38.531	29.669	1.00 69.28	AAAA
ATOM	47	CA	CYS	A	7	4.111	37.777	30.725	1.00 66.95	AAAA
ATOM	48	C	CYS	A	7	5.066	38.637	31.557	1.00 65.24	AAAA
ATOM	49	O	CYS	A	7	5.434	39.749	31.174	1.00 63.56	AAAA
ATOM	50	CB	CYS	A	7	4.832	36.558	30.153	1.00 67.15	AAAA
ATOM	51	SG	CYS	A	7	6.261	36.958	29.116	1.00 72.31	AAAA
ATOM	52	N	GLN	A	8	5.449	38.095	32.709	1.00 64.96	AAAA
ATOM	53	CA	GLN	A	8	6.307	38.766	33.686	1.00 63.57	AAAA
ATOM	54	CB	GLN	A	8	6.479	37.858	34.909	1.00 65.87	AAAA
ATOM	55	CG	GLN	A	8	5.170	37.326	35.483	1.00 67.89	AAAA
ATOM	56	CD	GLN	A	8	4.265	38.430	35.997	1.00 68.67	AAAA
ATOM	57	OE1	GLN	A	8	4.598	39.122	36.960	1.00 69.61	AAAA
ATOM	58	NE2	GLN	A	8	3.111	38.602	35.354	1.00 68.21	AAAA
ATOM	59	C	GLN	A	8	7.683	39.248	33.241	1.00 61.24	AAAA
ATOM	60	O	GLN	A	8	7.883	40.433	32.984	1.00 61.11	AAAA
ATOM	61	N	GLY	A	9	8.634	38.325	33.169	1.00 58.11	AAAA
ATOM	62	CA	GLY	A	9	9.987	38.693	32.801	1.00 55.50	AAAA
ATOM	63	C	GLY	A	9	10.897	38.263	33.936	1.00 53.90	AAAA
ATOM	64	O	GLY	A	9	10.416	37.730	34.935	1.00 54.68	AAAA
ATOM	65	N	THR	A	10	12.200	38.488	33.805	1.00 50.80	AAAA
ATOM	66	CA	THR	A	10	13.136	38.081	34.849	1.00 47.06	AAAA
ATOM	67	CB	THR	A	10	13.755	36.706	34.511	1.00 44.68	AAAA
ATOM	68	OG1	THR	A	10	14.440	36.777	33.260	1.00 46.21	AAAA
ATOM	69	CG2	THR	A	10	12.683	35.663	34.402	1.00 42.79	AAAA
ATOM	70	C	THR	A	10	14.256	39.088	35.126	1.00 46.00	AAAA

ATOM	71	O	THR	A	10	14.445	40.047	34.379	1.00	45.76	AAAA
ATOM	72	N	SER	A	11	14.986	38.859	36.218	1.00	45.78	AAAA
ATOM	73	CA	SER	A	11	16.095	39.726	36.627	1.00	45.34	AAAA
ATOM	74	CB	SER	A	11	15.606	40.778	37.629	1.00	45.79	AAAA
ATOM	75	OG	SER	A	11	14.494	41.502	37.136	1.00	51.46	AAAA
ATOM	76	C	SER	A	11	17.237	38.932	37.268	1.00	43.48	AAAA
ATOM	77	O	SER	A	11	17.754	39.319	38.313	1.00	45.02	AAAA
ATOM	78	N	ASN	A	12	17.627	37.829	36.642	1.00	41.56	AAAA
ATOM	79	CA	ASN	A	12	18.694	36.983	37.161	1.00	39.21	AAAA
ATOM	80	CB	ASN	A	12	18.465	35.514	36.787	1.00	39.19	AAAA
ATOM	81	CG	ASN	A	12	17.120	34.987	37.226	1.00	38.78	AAAA
ATOM	82	OD1	ASN	A	12	16.759	35.058	38.404	1.00	36.86	AAAA
ATOM	83	ND2	ASN	A	12	16.372	34.433	36.272	1.00	36.72	AAAA
ATOM	84	C	ASN	A	12	20.043	37.371	36.587	1.00	39.49	AAAA
ATOM	85	O	ASN	A	12	21.051	36.742	36.904	1.00	41.32	AAAA
ATOM	86	N	LYS	A	13	20.064	38.381	35.726	1.00	37.64	AAAA
ATOM	87	CA	LYS	A	13	21.299	38.803	35.087	1.00	37.61	AAAA
ATOM	88	CB	LYS	A	13	22.117	39.681	36.023	1.00	38.53	AAAA
ATOM	89	CG	LYS	A	13	21.391	40.962	36.380	1.00	42.75	AAAA
ATOM	90	CD	LYS	A	13	22.182	41.805	37.351	1.00	49.04	AAAA
ATOM	91	CE	LYS	A	13	21.405	43.057	37.738	1.00	53.41	AAAA
ATOM	92	NZ	LYS	A	13	21.143	43.955	36.569	1.00	54.41	AAAA
ATOM	93	C	LYS	A	13	22.121	37.604	34.622	1.00	38.28	AAAA
ATOM	94	O	LYS	A	13	21.635	36.788	33.829	1.00	38.36	AAAA
ATOM	95	N	LEU	A	14	23.353	37.480	35.114	1.00	36.00	AAAA
ATOM	96	CA	LEU	A	14	24.212	36.386	34.675	1.00	33.67	AAAA
ATOM	97	CB	LEU	A	14	25.652	36.865	34.542	1.00	30.77	AAAA
ATOM	98	CG	LEU	A	14	25.908	37.939	33.490	1.00	30.69	AAAA
ATOM	99	CD1	LEU	A	14	27.380	38.355	33.494	1.00	30.88	AAAA
ATOM	100	CD2	LEU	A	14	25.524	37.396	32.150	1.00	29.88	AAAA
ATOM	101	C	LEU	A	14	24.175	35.141	35.539	1.00	34.66	AAAA
ATOM	102	O	LEU	A	14	24.997	34.240	35.369	1.00	35.05	AAAA
ATOM	103	N	THR	A	15	23.219	35.075	36.454	1.00	34.78	AAAA
ATOM	104	CA	THR	A	15	23.091	33.908	37.321	1.00	36.84	AAAA
ATOM	105	CB	THR	A	15	22.265	34.237	38.573	1.00	36.85	AAAA
ATOM	106	OG1	THR	A	15	23.058	35.030	39.470	1.00	42.94	AAAA
ATOM	107	CG2	THR	A	15	21.847	32.986	39.274	1.00	36.85	AAAA
ATOM	108	C	THR	A	15	22.465	32.691	36.640	1.00	37.58	AAAA
ATOM	109	O	THR	A	15	21.637	32.816	35.742	1.00	38.68	AAAA
ATOM	110	N	GLN	A	16	22.880	31.507	37.074	1.00	38.69	AAAA
ATOM	111	CA	GLN	A	16	22.344	30.276	36.534	1.00	38.00	AAAA
ATOM	112	CB	GLN	A	16	23.461	29.300	36.195	1.00	36.30	AAAA
ATOM	113	CG	GLN	A	16	22.971	28.164	35.316	1.00	35.07	AAAA
ATOM	114	CD	GLN	A	16	24.077	27.257	34.844	1.00	34.89	AAAA
ATOM	115	OE1	GLN	A	16	25.152	27.717	34.439	1.00	34.49	AAAA
ATOM	116	NE2	GLN	A	16	23.816	25.954	34.868	1.00	34.64	AAAA
ATOM	117	C	GLN	A	16	21.429	29.671	37.596	1.00	40.26	AAAA
ATOM	118	O	GLN	A	16	21.736	29.722	38.787	1.00	40.86	AAAA
ATOM	119	N	LEU	A	17	20.306	29.098	37.165	1.00	40.16	AAAA
ATOM	120	CA	LEU	A	17	19.358	28.511	38.099	1.00	37.59	AAAA
ATOM	121	CB	LEU	A	17	17.941	28.933	37.722	1.00	35.67	AAAA
ATOM	122	CG	LEU	A	17	17.775	30.445	37.497	1.00	34.92	AAAA
ATOM	123	CD1	LEU	A	17	16.330	30.779	37.112	1.00	28.59	AAAA
ATOM	124	CD2	LEU	A	17	18.196	31.188	38.761	1.00	33.96	AAAA
ATOM	125	C	LEU	A	17	19.472	26.999	38.107	1.00	39.07	AAAA
ATOM	126	O	LEU	A	17	18.665	26.309	37.488	1.00	40.20	AAAA
ATOM	127	N	GLY	A	18	20.472	26.491	38.822	1.00	39.07	AAAA
ATOM	128	CA	GLY	A	18	20.685	25.061	38.898	1.00	39.60	AAAA
ATOM	129	C	GLY	A	18	21.381	24.564	37.647	1.00	42.13	AAAA
ATOM	130	O	GLY	A	18	22.177	25.291	37.055	1.00	43.87	AAAA
ATOM	131	N	THR	A	19	21.084	23.328	37.248	1.00	42.95	AAAA
ATOM	132	CA	THR	A	19	21.672	22.714	36.050	1.00	42.55	AAAA
ATOM	133	CB	THR	A	19	21.200	21.243	35.890	1.00	43.19	AAAA
ATOM	134	OG1	THR	A	19	19.786	21.223	35.645	1.00	45.22	AAAA
ATOM	135	CG2	THR	A	19	21.488	20.440	37.142	1.00	42.52	AAAA
ATOM	136	C	THR	A	19	21.268	23.457	34.771	1.00	41.04	AAAA
ATOM	137	O	THR	A	19	20.372	24.296	34.788	1.00	41.35	AAAA
ATOM	138	N	PHE	A	20	21.923	23.139	33.660	1.00	40.62	AAAA
ATOM	139	CA	PHE	A	20	21.579	23.765	32.386	1.00	40.80	AAAA
ATOM	140	CB	PHE	A	20	22.460	23.232	31.259	1.00	37.73	AAAA
ATOM	141	CG	PHE	A	20	23.835	23.823	31.230	1.00	36.96	AAAA
ATOM	142	CD1	PHE	A	20	24.927	23.047	30.855	1.00	36.72	AAAA
ATOM	143	CD2	PHE	A	20	24.040	25.166	31.547	1.00	36.87	AAAA
ATOM	144	CE1	PHE	A	20	26.206	23.599	30.793	1.00	36.02	AAAA
ATOM	145	CE2	PHE	A	20	25.307	25.728	31.488	1.00	34.90	AAAA

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ATOM	146	CZ	PHE	A	20	26.396	24.942	31.109	1.00	35.52	AAAA
ATOM	147	C	PHE	A	20	20.129	23.435	32.087	1.00	42.19	AAAA
ATOM	148	O	PHE	A	20	19.332	24.325	31.795	1.00	43.72	AAAA
ATOM	149	N	GLU	A	21	19.788	22.150	32.180	1.00	44.45	AAAA
ATOM	150	CA	GLU	A	21	18.424	21.706	31.922	1.00	44.35	AAAA
ATOM	151	CB	GLU	A	21	18.303	20.195	32.083	1.00	44.38	AAAA
ATOM	152	CG	GLU	A	21	16.888	19.716	31.872	1.00	47.84	AAAA
ATOM	153	CD	GLU	A	21	16.788	18.214	31.731	1.00	52.42	AAAA
ATOM	154	OE1	GLU	A	21	17.429	17.677	30.799	1.00	55.13	AAAA
ATOM	155	OE2	GLU	A	21	16.067	17.576	32.540	1.00	53.51	AAAA
ATOM	156	C	GLU	A	21	17.439	22.402	32.852	1.00	43.52	AAAA
ATOM	157	O	GLU	A	21	16.415	22.927	32.404	1.00	44.56	AAAA
ATOM	158	N	ASP	A	22	17.732	22.397	34.147	1.00	41.38	AAAA
ATOM	159	CA	ASP	A	22	16.854	23.075	35.080	1.00	40.14	AAAA
ATOM	160	CB	ASP	A	22	17.475	23.112	36.480	1.00	44.08	AAAA
ATOM	161	CG	ASP	A	22	17.243	21.835	37.260	1.00	47.25	AAAA
ATOM	162	OD1	ASP	A	22	16.204	21.179	37.014	1.00	48.39	AAAA
ATOM	163	OD2	ASP	A	22	18.085	21.507	38.131	1.00	46.89	AAAA
ATOM	164	C	ASP	A	22	16.670	24.508	34.582	1.00	37.26	AAAA
ATOM	165	O	ASP	A	22	15.568	24.957	34.305	1.00	34.37	AAAA
ATOM	166	N	HIS	A	23	17.786	25.212	34.473	1.00	36.01	AAAA
ATOM	167	CA	HIS	A	23	17.815	26.593	34.030	1.00	35.30	AAAA
ATOM	168	CB	HIS	A	23	19.265	26.970	33.737	1.00	32.68	AAAA
ATOM	169	CG	HIS	A	23	19.452	28.389	33.310	1.00	30.23	AAAA
ATOM	170	CD2	HIS	A	23	19.770	28.920	32.107	1.00	28.13	AAAA
ATOM	171	ND1	HIS	A	23	19.349	29.448	34.182	1.00	31.89	AAAA
ATOM	172	CE1	HIS	A	23	19.600	30.571	33.536	1.00	32.54	AAAA
ATOM	173	NE2	HIS	A	23	19.860	30.277	32.276	1.00	31.85	AAAA
ATOM	174	C	HIS	A	23	16.951	26.810	32.786	1.00	37.38	AAAA
ATOM	175	O	HIS	A	23	16.247	27.819	32.666	1.00	37.60	AAAA
ATOM	176	N	PHE	A	24	17.017	25.857	31.864	1.00	38.04	AAAA
ATOM	177	CA	PHE	A	24	16.259	25.930	30.622	1.00	39.10	AAAA
ATOM	178	CB	PHE	A	24	16.729	24.857	29.654	1.00	36.88	AAAA
ATOM	179	CG	PHE	A	24	15.936	24.824	28.406	1.00	41.27	AAAA
ATOM	180	CD1	PHE	A	24	16.170	25.749	27.401	1.00	40.97	AAAA
ATOM	181	CD2	PHE	A	24	14.887	23.918	28.256	1.00	42.74	AAAA
ATOM	182	CE1	PHE	A	24	15.365	25.774	26.258	1.00	42.56	AAAA
ATOM	183	CE2	PHE	A	24	14.081	23.939	27.121	1.00	42.07	AAAA
ATOM	184	CZ	PHE	A	24	14.322	24.868	26.123	1.00	41.24	AAAA
ATOM	185	C	PHE	A	24	14.746	25.786	30.805	1.00	40.50	AAAA
ATOM	186	O	PHE	A	24	13.961	26.455	30.129	1.00	40.46	AAAA
ATOM	187	N	LEU	A	25	14.336	24.891	31.700	1.00	41.14	AAAA
ATOM	188	CA	LEU	A	25	12.918	24.682	31.953	1.00	39.95	AAAA
ATOM	189	CB	LEU	A	25	12.724	23.485	32.872	1.00	37.25	AAAA
ATOM	190	CG	LEU	A	25	13.249	22.207	32.226	1.00	39.85	AAAA
ATOM	191	CD1	LEU	A	25	13.214	21.072	33.224	1.00	41.08	AAAA
ATOM	192	CD2	LEU	A	25	12.400	21.872	31.008	1.00	40.45	AAAA
ATOM	193	C	LEU	A	25	12.339	25.928	32.585	1.00	40.91	AAAA
ATOM	194	O	LEU	A	25	11.164	26.252	32.398	1.00	44.10	AAAA
ATOM	195	N	SER	A	26	13.175	26.631	33.338	1.00	40.58	AAAA
ATOM	196	CA	SER	A	26	12.754	27.845	34.001	1.00	39.54	AAAA
ATOM	197	CB	SER	A	26	13.851	28.286	34.967	1.00	40.04	AAAA
ATOM	198	OG	SER	A	26	13.429	29.363	35.788	1.00	43.84	AAAA
ATOM	199	C	SER	A	26	12.493	28.919	32.942	1.00	39.74	AAAA
ATOM	200	O	SER	A	26	11.511	29.661	33.011	1.00	38.61	AAAA
ATOM	201	N	LEU	A	27	13.375	28.986	31.953	1.00	38.61	AAAA
ATOM	202	CA	LEU	A	27	13.240	29.970	30.895	1.00	40.17	AAAA
ATOM	203	CB	LEU	A	27	14.445	29.911	29.954	1.00	40.01	AAAA
ATOM	204	CG	LEU	A	27	14.287	30.792	28.711	1.00	41.17	AAAA
ATOM	205	CD1	LEU	A	27	14.199	32.248	29.139	1.00	41.18	AAAA
ATOM	206	CD2	LEU	A	27	15.450	30.590	27.762	1.00	42.19	AAAA
ATOM	207	C	LEU	A	27	11.976	29.710	30.097	1.00	41.62	AAAA
ATOM	208	O	LEU	A	27	11.123	30.583	29.941	1.00	41.12	AAAA
ATOM	209	N	GLN	A	28	11.877	28.486	29.595	1.00	43.19	AAAA
ATOM	210	CA	GLN	A	28	10.753	28.045	28.787	1.00	43.50	AAAA
ATOM	211	CB	GLN	A	28	10.934	26.580	28.442	1.00	42.43	AAAA
ATOM	212	CG	GLN	A	28	9.836	26.003	27.599	1.00	43.05	AAAA
ATOM	213	CD	GLN	A	28	10.100	24.559	27.308	1.00	42.31	AAAA
ATOM	214	OE1	GLN	A	28	10.224	23.756	28.234	1.00	44.16	AAAA
ATOM	215	NE2	GLN	A	28	10.210	24.212	26.027	1.00	39.06	AAAA
ATOM	216	C	GLN	A	28	9.422	28.242	29.478	1.00	44.73	AAAA
ATOM	217	O	GLN	A	28	8.405	28.496	28.833	1.00	46.56	AAAA
ATOM	218	N	ARG	A	29	9.431	28.133	30.796	1.00	44.55	AAAA
ATOM	219	CA	ARG	A	29	8.213	28.293	31.549	1.00	45.21	AAAA
ATOM	220	CB	ARG	A	29	8.378	27.655	32.926	1.00	44.13	AAAA

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ATOM	221	CG	ARG	A	29	7.081	27.429	33.645	1.00	45.42	AAAA
ATOM	222	CD	ARG	A	29	7.292	26.811	35.006	1.00	47.52	AAAA
ATOM	223	NE	ARG	A	29	8.120	25.610	34.963	1.00	49.99	AAAA
ATOM	224	CZ	ARG	A	29	9.315	25.505	35.546	1.00	51.33	AAAA
ATOM	225	NH1	ARG	A	29	9.829	26.538	36.216	1.00	51.14	AAAA
ATOM	226	NH2	ARG	A	29	9.990	24.361	35.477	1.00	48.58	AAAA
ATOM	227	C	ARG	A	29	7.871	29.769	31.679	1.00	46.59	AAAA
ATOM	228	O	ARG	A	29	6.712	30.149	31.655	1.00	48.01	AAAA
ATOM	229	N	MET	A	30	8.887	30.609	31.790	1.00	49.05	AAAA
ATOM	230	CA	MET	A	30	8.653	32.039	31.954	1.00	50.83	AAAA
ATOM	231	CB	MET	A	30	9.880	32.697	32.618	1.00	51.68	AAAA
ATOM	232	CG	MET	A	30	9.999	32.497	34.141	1.00	51.70	AAAA
ATOM	233	SD	MET	A	30	8.875	33.545	35.156	1.00	55.08	AAAA
ATOM	234	CE	MET	A	30	7.485	32.337	35.438	1.00	52.70	AAAA
ATOM	235	C	MET	A	30	8.284	32.808	30.686	1.00	52.17	AAAA
ATOM	236	O	MET	A	30	7.807	33.934	30.781	1.00	52.48	AAAA
ATOM	237	N	PHE	A	31	8.486	32.213	29.509	1.00	53.51	AAAA
ATOM	238	CA	PHE	A	31	8.186	32.903	28.253	1.00	53.79	AAAA
ATOM	239	CB	PHE	A	31	9.487	33.412	27.630	1.00	51.40	AAAA
ATOM	240	CG	PHE	A	31	10.256	34.340	28.510	1.00	47.05	AAAA
ATOM	241	CD1	PHE	A	31	11.473	33.955	29.045	1.00	47.16	AAAA
ATOM	242	CD2	PHE	A	31	9.756	35.587	28.824	1.00	44.05	AAAA
ATOM	243	CE1	PHE	A	31	12.181	34.803	29.883	1.00	45.76	AAAA
ATOM	244	CE2	PHE	A	31	10.457	36.439	29.660	1.00	44.60	AAAA
ATOM	245	CZ	PHE	A	31	11.670	36.049	30.191	1.00	44.40	AAAA
ATOM	246	C	PHE	A	31	7.441	32.094	27.192	1.00	57.07	AAAA
ATOM	247	O	PHE	A	31	7.307	32.554	26.064	1.00	56.09	AAAA
ATOM	248	N	ASN	A	32	6.954	30.910	27.550	1.00	61.83	AAAA
ATOM	249	CA	ASN	A	32	6.264	30.027	26.609	1.00	66.77	AAAA
ATOM	250	CB	ASN	A	32	5.398	29.025	27.350	1.00	71.67	AAAA
ATOM	251	CG	ASN	A	32	5.129	27.789	26.523	1.00	79.03	AAAA
ATOM	252	OD1	ASN	A	32	5.201	27.830	25.297	1.00	78.00	AAAA
ATOM	253	ND2	ASN	A	32	4.816	26.686	27.193	1.00	87.42	AAAA
ATOM	254	C	ASN	A	32	5.407	30.657	25.516	1.00	67.85	AAAA
ATOM	255	O	ASN	A	32	5.795	30.693	24.345	1.00	70.14	AAAA
ATOM	256	N	ASN	A	33	4.220	31.117	25.880	1.00	67.36	AAAA
ATOM	257	CA	ASN	A	33	3.338	31.727	24.894	1.00	67.78	AAAA
ATOM	258	CB	ASN	A	33	1.929	31.139	25.003	1.00	68.45	AAAA
ATOM	259	CG	ASN	A	33	1.919	29.619	24.947	1.00	71.16	AAAA
ATOM	260	OD1	ASN	A	33	2.033	29.017	23.872	1.00	72.17	AAAA
ATOM	261	ND2	ASN	A	33	1.790	28.987	26.113	1.00	70.92	AAAA
ATOM	262	C	ASN	A	33	3.288	33.208	25.202	1.00	67.66	AAAA
ATOM	263	O	ASN	A	33	2.224	33.750	25.476	1.00	68.45	AAAA
ATOM	264	N	CYS	A	34	4.438	33.869	25.159	1.00	66.81	AAAA
ATOM	265	CA	CYS	A	34	4.473	35.287	25.482	1.00	65.05	AAAA
ATOM	266	C	CYS	A	34	4.712	36.190	24.283	1.00	63.37	AAAA
ATOM	267	O	CYS	A	34	5.594	35.944	23.469	1.00	62.13	AAAA
ATOM	268	CB	CYS	A	34	5.541	35.546	26.545	1.00	66.21	AAAA
ATOM	269	SG	CYS	A	34	5.468	37.213	27.269	1.00	68.30	AAAA
ATOM	270	N	GLU	A	35	3.911	37.243	24.189	1.00	62.51	AAAA
ATOM	271	CA	GLU	A	35	4.023	38.204	23.106	1.00	63.05	AAAA
ATOM	272	CB	GLU	A	35	2.650	38.449	22.489	1.00	64.48	AAAA
ATOM	273	CG	GLU	A	35	2.111	37.250	21.746	1.00	67.60	AAAA
ATOM	274	CD	GLU	A	35	0.694	37.457	21.285	1.00	69.89	AAAA
ATOM	275	OE1	GLU	A	35	0.413	38.555	20.758	1.00	72.02	AAAA
ATOM	276	OE2	GLU	A	35	-0.133	36.528	21.442	1.00	70.19	AAAA
ATOM	277	C	GLU	A	35	4.618	39.511	23.617	1.00	62.34	AAAA
ATOM	278	O	GLU	A	35	5.366	40.193	22.906	1.00	62.43	AAAA
ATOM	279	N	VAL	A	36	4.278	39.870	24.849	1.00	61.08	AAAA
ATOM	280	CA	VAL	A	36	4.826	41.083	25.446	1.00	60.15	AAAA
ATOM	281	CB	VAL	A	36	3.741	42.133	25.690	1.00	60.11	AAAA
ATOM	282	CG1	VAL	A	36	4.341	43.343	26.386	1.00	59.33	AAAA
ATOM	283	CG2	VAL	A	36	3.122	42.540	24.367	1.00	61.58	AAAA
ATOM	284	C	VAL	A	36	5.518	40.775	26.770	1.00	58.42	AAAA
ATOM	285	O	VAL	A	36	4.989	40.040	27.611	1.00	57.58	AAAA
ATOM	286	N	VAL	A	37	6.716	41.324	26.938	1.00	55.82	AAAA
ATOM	287	CA	VAL	A	37	7.468	41.119	28.166	1.00	53.38	AAAA
ATOM	288	CB	VAL	A	37	8.928	40.672	27.899	1.00	53.54	AAAA
ATOM	289	CG1	VAL	A	37	9.642	40.454	29.214	1.00	50.19	AAAA
ATOM	290	CG2	VAL	A	37	8.951	39.388	27.076	1.00	53.07	AAAA
ATOM	291	C	VAL	A	37	7.497	42.429	28.922	1.00	52.08	AAAA
ATOM	292	O	VAL	A	37	8.115	43.404	28.479	1.00	51.36	AAAA
ATOM	293	N	LEU	A	38	6.814	42.449	30.060	1.00	51.26	AAAA
ATOM	294	CA	LEU	A	38	6.756	43.635	30.899	1.00	51.36	AAAA
ATOM	295	CB	LEU	A	38	5.665	43.447	31.944	1.00	54.36	AAAA

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ATOM	296	CG	LEU	A	38	4.261	43.423	31.333	1.00	55.88	AAAA
ATOM	297	CD1	LEU	A	38	3.219	43.106	32.398	1.00	53.81	AAAA
ATOM	298	CD2	LEU	A	38	3.989	44.781	30.672	1.00	55.58	AAAA
ATOM	299	C	LEU	A	38	8.106	43.921	31.567	1.00	51.11	AAAA
ATOM	300	O	LEU	A	38	8.477	45.080	31.784	1.00	50.75	AAAA
ATOM	301	N	GLY	A	39	8.839	42.858	31.888	1.00	48.80	AAAA
ATOM	302	CA	GLY	A	39	10.140	43.024	32.497	1.00	47.84	AAAA
ATOM	303	C	GLY	A	39	11.247	42.948	31.462	1.00	47.88	AAAA
ATOM	304	O	GLY	A	39	11.175	43.574	30.406	1.00	48.12	AAAA
ATOM	305	N	ASN	A	40	12.282	42.178	31.768	1.00	46.62	AAAA
ATOM	306	CA	ASN	A	40	13.400	42.021	30.861	1.00	43.86	AAAA
ATOM	307	CB	ASN	A	40	14.712	42.206	31.600	1.00	45.69	AAAA
ATOM	308	CG	ASN	A	40	14.713	43.435	32.454	1.00	48.30	AAAA
ATOM	309	OD1	ASN	A	40	14.555	44.555	31.953	1.00	48.26	AAAA
ATOM	310	ND2	ASN	A	40	14.887	43.244	33.759	1.00	47.89	AAAA
ATOM	311	C	ASN	A	40	13.386	40.637	30.272	1.00	42.17	AAAA
ATOM	312	O	ASN	A	40	12.754	39.720	30.803	1.00	41.36	AAAA
ATOM	313	N	LEU	A	41	14.079	40.491	29.153	1.00	38.93	AAAA
ATOM	314	CA	LEU	A	41	14.182	39.199	28.521	1.00	35.15	AAAA
ATOM	315	CB	LEU	A	41	13.802	39.293	27.044	1.00	34.04	AAAA
ATOM	316	CG	LEU	A	41	14.014	38.034	26.202	1.00	33.00	AAAA
ATOM	317	CD1	LEU	A	41	13.199	36.893	26.763	1.00	30.49	AAAA
ATOM	318	CD2	LEU	A	41	13.626	38.326	24.757	1.00	32.03	AAAA
ATOM	319	C	LEU	A	41	15.645	38.803	28.694	1.00	34.19	AAAA
ATOM	320	O	LEU	A	41	16.555	39.477	28.195	1.00	32.52	AAAA
ATOM	321	N	GLU	A	42	15.859	37.730	29.444	1.00	31.73	AAAA
ATOM	322	CA	GLU	A	42	17.190	37.230	29.696	1.00	29.38	AAAA
ATOM	323	CB	GLU	A	42	17.481	37.297	31.187	1.00	29.65	AAAA
ATOM	324	CG	GLU	A	42	17.583	38.718	31.724	1.00	29.88	AAAA
ATOM	325	CD	GLU	A	42	17.623	38.766	33.244	1.00	29.81	AAAA
ATOM	326	OE1	GLU	A	42	18.178	39.756	33.789	1.00	28.19	AAAA
ATOM	327	OE2	GLU	A	42	17.086	37.824	33.884	1.00	25.40	AAAA
ATOM	328	C	GLU	A	42	17.342	35.800	29.200	1.00	29.63	AAAA
ATOM	329	O	GLU	A	42	16.810	34.857	29.790	1.00	30.60	AAAA
ATOM	330	N	ILE	A	43	18.070	35.636	28.108	1.00	28.89	AAAA
ATOM	331	CA	ILE	A	43	18.301	34.313	27.552	1.00	29.01	AAAA
ATOM	332	CB	ILE	A	43	18.001	34.303	26.043	1.00	26.97	AAAA
ATOM	333	CG2	ILE	A	43	18.195	32.901	25.460	1.00	26.39	AAAA
ATOM	334	CG1	ILE	A	43	16.545	34.711	25.827	1.00	25.92	AAAA
ATOM	335	CD1	ILE	A	43	16.297	35.280	24.460	1.00	28.07	AAAA
ATOM	336	C	ILE	A	43	19.757	33.992	27.848	1.00	29.64	AAAA
ATOM	337	O	ILE	A	43	20.669	34.555	27.248	1.00	31.56	AAAA
ATOM	338	N	THR	A	44	19.967	33.079	28.788	1.00	29.40	AAAA
ATOM	339	CA	THR	A	44	21.312	32.749	29.205	1.00	29.05	AAAA
ATOM	340	CB	THR	A	44	21.633	33.468	30.521	1.00	29.58	AAAA
ATOM	341	OG1	THR	A	44	20.720	33.033	31.537	1.00	25.70	AAAA
ATOM	342	CG2	THR	A	44	21.480	34.975	30.351	1.00	29.22	AAAA
ATOM	343	C	THR	A	44	21.585	31.277	29.411	1.00	31.35	AAAA
ATOM	344	O	THR	A	44	20.715	30.519	29.824	1.00	32.38	AAAA
ATOM	345	N	TYR	A	45	22.817	30.881	29.121	1.00	32.62	AAAA
ATOM	346	CA	TYR	A	45	23.260	29.510	29.308	1.00	32.93	AAAA
ATOM	347	CB	TYR	A	45	23.240	29.172	30.797	1.00	31.36	AAAA
ATOM	348	CG	TYR	A	45	24.069	30.118	31.637	1.00	31.06	AAAA
ATOM	349	CD1	TYR	A	45	23.468	31.068	32.444	1.00	29.52	AAAA
ATOM	350	CE1	TYR	A	45	24.232	31.944	33.204	1.00	31.24	AAAA
ATOM	351	CD2	TYR	A	45	25.463	30.066	31.607	1.00	30.96	AAAA
ATOM	352	CE2	TYR	A	45	26.235	30.934	32.361	1.00	30.37	AAAA
ATOM	353	CZ	TYR	A	45	25.617	31.873	33.158	1.00	32.02	AAAA
ATOM	354	OH	TYR	A	45	26.383	32.747	33.907	1.00	30.65	AAAA
ATOM	355	C	TYR	A	45	22.541	28.412	28.537	1.00	34.83	AAAA
ATOM	356	O	TYR	A	45	22.683	27.245	28.878	1.00	37.56	AAAA
ATOM	357	N	VAL	A	46	21.777	28.751	27.505	1.00	35.00	AAAA
ATOM	358	CA	VAL	A	46	21.107	27.706	26.743	1.00	34.52	AAAA
ATOM	359	CB	VAL	A	46	20.071	28.285	25.763	1.00	33.22	AAAA
ATOM	360	CG1	VAL	A	46	19.555	27.176	24.851	1.00	29.52	AAAA
ATOM	361	CG2	VAL	A	46	18.909	28.921	26.553	1.00	28.78	AAAA
ATOM	362	C	VAL	A	46	22.170	26.926	25.979	1.00	36.52	AAAA
ATOM	363	O	VAL	A	46	23.033	27.511	25.328	1.00	39.39	AAAA
ATOM	364	N	GLN	A	47	22.112	25.601	26.063	1.00	37.97	AAAA
ATOM	365	CA	GLN	A	47	23.100	24.750	25.405	1.00	39.51	AAAA
ATOM	366	CB	GLN	A	47	23.356	23.527	26.275	1.00	39.35	AAAA
ATOM	367	CG	GLN	A	47	23.792	23.884	27.675	1.00	38.72	AAAA
ATOM	368	CD	GLN	A	47	25.005	24.760	27.648	1.00	37.88	AAAA
ATOM	369	OE1	GLN	A	47	26.040	24.356	27.159	1.00	38.96	AAAA
ATOM	370	NE2	GLN	A	47	24.882	25.972	28.155	1.00	39.37	AAAA

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ATOM	371	C	GLN	A	47	22.714	24.302	24.003	1.00	41.84	AAAA
ATOM	372	O	GLN	A	47	21.617	24.596	23.526	1.00	44.46	AAAA
ATOM	373	N	ARG	A	48	23.619	23.587	23.341	1.00	42.07	AAAA
ATOM	374	CA	ARG	A	48	23.357	23.088	21.997	1.00	42.51	AAAA
ATOM	375	CB	ARG	A	48	24.585	22.374	21.439	1.00	43.72	AAAA
ATOM	376	CG	ARG	A	48	25.650	23.269	20.865	1.00	45.93	AAAA
ATOM	377	CD	ARG	A	48	25.308	23.664	19.456	1.00	48.91	AAAA
ATOM	378	NE	ARG	A	48	26.333	24.522	18.861	1.00	52.47	AAAA
ATOM	379	CZ	ARG	A	48	26.347	24.860	17.574	1.00	52.99	AAAA
ATOM	380	NH1	ARG	A	48	25.398	24.405	16.773	1.00	54.62	AAAA
ATOM	381	NH2	ARG	A	48	27.292	25.654	17.089	1.00	53.96	AAAA
ATOM	382	C	ARG	A	48	22.183	22.114	21.954	1.00	43.12	AAAA
ATOM	383	O	ARG	A	48	22.040	21.255	22.820	1.00	41.21	AAAA
ATOM	384	N	ASN	A	49	21.351	22.268	20.927	1.00	43.46	AAAA
ATOM	385	CA	ASN	A	49	20.200	21.407	20.692	1.00	44.27	AAAA
ATOM	386	CB	ASN	A	49	20.612	19.933	20.752	1.00	46.04	AAAA
ATOM	387	CG	ASN	A	49	21.737	19.608	19.790	1.00	49.31	AAAA
ATOM	388	OD1	ASN	A	49	21.733	20.046	18.638	1.00	50.48	AAAA
ATOM	389	ND2	ASN	A	49	22.710	18.836	20.257	1.00	51.17	AAAA
ATOM	390	C	ASN	A	49	18.985	21.620	21.570	1.00	43.26	AAAA
ATOM	391	O	ASN	A	49	18.110	20.761	21.630	1.00	45.50	AAAA
ATOM	392	N	TYR	A	50	18.922	22.736	22.272	1.00	40.42	AAAA
ATOM	393	CA	TYR	A	50	17.740	22.989	23.064	1.00	40.65	AAAA
ATOM	394	CB	TYR	A	50	18.073	23.717	24.366	1.00	37.63	AAAA
ATOM	395	CG	TYR	A	50	18.410	22.788	25.508	1.00	34.03	AAAA
ATOM	396	CD1	TYR	A	50	19.620	22.105	25.539	1.00	31.93	AAAA
ATOM	397	CE1	TYR	A	50	19.935	21.248	26.593	1.00	32.64	AAAA
ATOM	398	CD2	TYR	A	50	17.510	22.589	26.559	1.00	33.28	AAAA
ATOM	399	CE2	TYR	A	50	17.815	21.730	27.621	1.00	32.77	AAAA
ATOM	400	CZ	TYR	A	50	19.037	21.067	27.629	1.00	33.14	AAAA
ATOM	401	OH	TYR	A	50	19.385	20.253	28.686	1.00	35.29	AAAA
ATOM	402	C	TYR	A	50	16.906	23.859	22.154	1.00	42.05	AAAA
ATOM	403	O	TYR	A	50	17.405	24.829	21.595	1.00	43.55	AAAA
ATOM	404	N	ASP	A	51	15.642	23.507	21.976	1.00	43.72	AAAA
ATOM	405	CA	ASP	A	51	14.803	24.277	21.075	1.00	45.27	AAAA
ATOM	406	CB	ASP	A	51	13.638	23.434	20.558	1.00	46.52	AAAA
ATOM	407	CG	ASP	A	51	12.800	24.182	19.552	1.00	47.69	AAAA
ATOM	408	OD1	ASP	A	51	13.354	24.546	18.495	1.00	49.38	AAAA
ATOM	409	OD2	ASP	A	51	11.601	24.416	19.819	1.00	48.35	AAAA
ATOM	410	C	ASP	A	51	14.263	25.535	21.708	1.00	44.96	AAAA
ATOM	411	O	ASP	A	51	13.631	25.488	22.764	1.00	45.99	AAAA
ATOM	412	N	LEU	A	52	14.505	26.658	21.043	1.00	42.77	AAAA
ATOM	413	CA	LEU	A	52	14.053	27.945	21.531	1.00	41.91	AAAA
ATOM	414	CB	LEU	A	52	15.233	28.915	21.590	1.00	40.33	AAAA
ATOM	415	CG	LEU	A	52	16.300	28.599	22.638	1.00	39.29	AAAA
ATOM	416	CD1	LEU	A	52	17.490	29.515	22.467	1.00	38.52	AAAA
ATOM	417	CD2	LEU	A	52	15.698	28.760	24.021	1.00	39.03	AAAA
ATOM	418	C	LEU	A	52	12.965	28.499	20.621	1.00	42.92	AAAA
ATOM	419	O	LEU	A	52	12.693	29.709	20.616	1.00	43.03	AAAA
ATOM	420	N	SER	A	53	12.332	27.612	19.859	1.00	42.28	AAAA
ATOM	421	CA	SER	A	53	11.291	28.030	18.933	1.00	41.55	AAAA
ATOM	422	CB	SER	A	53	10.695	26.825	18.229	1.00	43.43	AAAA
ATOM	423	OG	SER	A	53	11.700	26.112	17.525	1.00	47.51	AAAA
ATOM	424	C	SER	A	53	10.191	28.792	19.629	1.00	41.91	AAAA
ATOM	425	O	SER	A	53	9.550	29.643	19.022	1.00	41.70	AAAA
ATOM	426	N	PHE	A	54	9.975	28.498	20.908	1.00	42.18	AAAA
ATOM	427	CA	PHE	A	54	8.928	29.174	21.647	1.00	41.47	AAAA
ATOM	428	CB	PHE	A	54	8.750	28.550	23.030	1.00	43.28	AAAA
ATOM	429	CG	PHE	A	54	9.882	28.816	23.981	1.00	43.30	AAAA
ATOM	430	CD1	PHE	A	54	9.988	30.035	24.635	1.00	42.85	AAAA
ATOM	431	CD2	PHE	A	54	10.841	27.840	24.229	1.00	41.88	AAAA
ATOM	432	CE1	PHE	A	54	11.033	30.272	25.519	1.00	43.80	AAAA
ATOM	433	CE2	PHE	A	54	11.883	28.072	25.112	1.00	41.15	AAAA
ATOM	434	CZ	PHE	A	54	11.983	29.283	25.756	1.00	39.85	AAAA
ATOM	435	C	PHE	A	54	9.205	30.653	21.776	1.00	42.13	AAAA
ATOM	436	O	PHE	A	54	8.334	31.411	22.199	1.00	44.55	AAAA
ATOM	437	N	LEU	A	55	10.412	31.068	21.402	1.00	42.00	AAAA
ATOM	438	CA	LEU	A	55	10.796	32.480	21.478	1.00	41.40	AAAA
ATOM	439	CB	LEU	A	55	12.328	32.623	21.508	1.00	39.77	AAAA
ATOM	440	CG	LEU	A	55	13.057	32.401	22.842	1.00	38.03	AAAA
ATOM	441	CD1	LEU	A	55	14.578	32.528	22.652	1.00	34.81	AAAA
ATOM	442	CD2	LEU	A	55	12.553	33.409	23.850	1.00	34.76	AAAA
ATOM	443	C	LEU	A	55	10.245	33.316	20.329	1.00	41.19	AAAA
ATOM	444	O	LEU	A	55	10.271	34.546	20.374	1.00	40.16	AAAA
ATOM	445	N	LYS	A	56	9.748	32.642	19.299	1.00	43.68	AAAA

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ATOM	446	CA	LYS	A	56	9.222	33.318	18.125	1.00	43.14	AAAA
ATOM	447	CB	LYS	A	56	8.900	32.307	17.035	1.00	44.23	AAAA
ATOM	448	CG	LYS	A	56	10.106	31.666	16.395	1.00	44.41	AAAA
ATOM	449	CD	LYS	A	56	9.670	30.651	15.363	1.00	46.05	AAAA
ATOM	450	CE	LYS	A	56	10.862	29.933	14.757	1.00	49.74	AAAA
ATOM	451	NZ	LYS	A	56	10.420	28.757	13.951	1.00	52.85	AAAA
ATOM	452	C	LYS	A	56	8.001	34.164	18.400	1.00	44.95	AAAA
ATOM	453	O	LYS	A	56	7.647	35.007	17.584	1.00	46.29	AAAA
ATOM	454	N	THR	A	57	7.349	33.969	19.539	1.00	45.79	AAAA
ATOM	455	CA	THR	A	57	6.175	34.780	19.813	1.00	48.11	AAAA
ATOM	456	CB	THR	A	57	5.128	34.009	20.689	1.00	49.20	AAAA
ATOM	457	OG1	THR	A	57	5.721	33.587	21.923	1.00	53.29	AAAA
ATOM	458	CG2	THR	A	57	4.613	32.786	19.950	1.00	48.09	AAAA
ATOM	459	C	THR	A	57	6.463	36.148	20.445	1.00	48.67	AAAA
ATOM	460	O	THR	A	57	5.592	37.019	20.442	1.00	51.05	AAAA
ATOM	461	N	ILE	A	58	7.668	36.367	20.966	1.00	47.16	AAAA
ATOM	462	CA	ILE	A	58	7.962	37.655	21.605	1.00	46.96	AAAA
ATOM	463	CB	ILE	A	58	9.354	37.677	22.273	1.00	45.80	AAAA
ATOM	464	CG2	ILE	A	58	9.596	39.035	22.891	1.00	41.40	AAAA
ATOM	465	CG1	ILE	A	58	9.460	36.589	23.339	1.00	45.34	AAAA
ATOM	466	CD1	ILE	A	58	8.646	36.855	24.572	1.00	47.13	AAAA
ATOM	467	C	ILE	A	58	7.908	38.818	20.622	1.00	47.88	AAAA
ATOM	468	O	ILE	A	58	8.682	38.865	19.669	1.00	49.59	AAAA
ATOM	469	N	GLN	A	59	7.013	39.771	20.871	1.00	48.26	AAAA
ATOM	470	CA	GLN	A	59	6.869	40.928	19.994	1.00	48.90	AAAA
ATOM	471	CB	GLN	A	59	5.392	41.134	19.641	1.00	48.93	AAAA
ATOM	472	CG	GLN	A	59	4.867	40.142	18.608	1.00	50.27	AAAA
ATOM	473	CD	GLN	A	59	3.385	39.857	18.763	1.00	52.51	AAAA
ATOM	474	OE1	GLN	A	59	2.577	40.775	18.946	1.00	55.61	AAAA
ATOM	475	NE2	GLN	A	59	3.016	38.579	18.683	1.00	49.97	AAAA
ATOM	476	C	GLN	A	59	7.437	42.192	20.616	1.00	49.41	AAAA
ATOM	477	O	GLN	A	59	7.981	43.049	19.914	1.00	48.64	AAAA
ATOM	478	N	GLU	A	60	7.317	42.301	21.938	1.00	50.81	AAAA
ATOM	479	CA	GLU	A	60	7.818	43.471	22.662	1.00	51.26	AAAA
ATOM	480	CB	GLU	A	60	6.675	44.450	22.948	1.00	54.42	AAAA
ATOM	481	CG	GLU	A	60	5.981	45.020	21.725	1.00	59.92	AAAA
ATOM	482	CD	GLU	A	60	5.015	46.149	22.073	1.00	64.28	AAAA
ATOM	483	OE1	GLU	A	60	4.721	46.970	21.174	1.00	68.39	AAAA
ATOM	484	OE2	GLU	A	60	4.546	46.217	23.235	1.00	63.45	AAAA
ATOM	485	C	GLU	A	60	8.487	43.128	23.991	1.00	49.46	AAAA
ATOM	486	O	GLU	A	60	8.099	42.186	24.681	1.00	50.95	AAAA
ATOM	487	N	VAL	A	61	9.493	43.911	24.347	1.00	46.82	AAAA
ATOM	488	CA	VAL	A	61	10.195	43.735	25.610	1.00	44.70	AAAA
ATOM	489	CB	VAL	A	61	11.633	43.187	25.401	1.00	44.81	AAAA
ATOM	490	CG1	VAL	A	61	12.542	43.640	26.539	1.00	42.71	AAAA
ATOM	491	CG2	VAL	A	61	11.602	41.659	25.327	1.00	42.99	AAAA
ATOM	492	C	VAL	A	61	10.250	45.122	26.227	1.00	43.84	AAAA
ATOM	493	O	VAL	A	61	10.854	46.034	25.657	1.00	43.48	AAAA
ATOM	494	N	ALA	A	62	9.612	45.281	27.385	1.00	43.32	AAAA
ATOM	495	CA	ALA	A	62	9.568	46.580	28.056	1.00	43.36	AAAA
ATOM	496	CB	ALA	A	62	8.506	46.572	29.114	1.00	44.21	AAAA
ATOM	497	C	ALA	A	62	10.890	47.008	28.662	1.00	43.04	AAAA
ATOM	498	O	ALA	A	62	11.280	48.161	28.540	1.00	43.32	AAAA
ATOM	499	N	GLY	A	63	11.585	46.078	29.308	1.00	42.69	AAAA
ATOM	500	CA	GLY	A	63	12.853	46.417	29.931	1.00	43.31	AAAA
ATOM	501	C	GLY	A	63	14.040	46.305	28.994	1.00	43.30	AAAA
ATOM	502	O	GLY	A	63	14.090	46.986	27.962	1.00	42.53	AAAA
ATOM	503	N	TYR	A	64	15.000	45.453	29.357	1.00	40.39	AAAA
ATOM	504	CA	TYR	A	64	16.184	45.248	28.537	1.00	37.37	AAAA
ATOM	505	CB	TYR	A	64	17.443	45.582	29.332	1.00	38.21	AAAA
ATOM	506	CG	TYR	A	64	17.678	44.694	30.532	1.00	41.19	AAAA
ATOM	507	CD1	TYR	A	64	18.180	43.397	30.390	1.00	39.84	AAAA
ATOM	508	CE1	TYR	A	64	18.427	42.599	31.510	1.00	42.33	AAAA
ATOM	509	CD2	TYR	A	64	17.424	45.164	31.821	1.00	41.96	AAAA
ATOM	510	CE2	TYR	A	64	17.667	44.376	32.944	1.00	41.43	AAAA
ATOM	511	CZ	TYR	A	64	18.168	43.101	32.791	1.00	43.66	AAAA
ATOM	512	OH	TYR	A	64	18.423	42.348	33.924	1.00	43.08	AAAA
ATOM	513	C	TYR	A	64	16.251	43.809	28.046	1.00	36.03	AAAA
ATOM	514	O	TYR	A	64	15.478	42.952	28.489	1.00	37.32	AAAA
ATOM	515	N	VAL	A	65	17.167	43.549	27.118	1.00	32.77	AAAA
ATOM	516	CA	VAL	A	65	17.341	42.217	26.573	1.00	30.05	AAAA
ATOM	517	CB	VAL	A	65	17.011	42.177	25.066	1.00	29.78	AAAA
ATOM	518	CG1	VAL	A	65	17.346	40.811	24.484	1.00	29.57	AAAA
ATOM	519	CG2	VAL	A	65	15.554	42.468	24.861	1.00	28.97	AAAA
ATOM	520	C	VAL	A	65	18.779	41.764	26.782	1.00	29.60	AAAA

ATOM	521	O	VAL	A	65	19.720	42.363	26.247	1.00	28.99	AAAA
ATOM	522	N	LEU	A	66	18.938	40.703	27.566	1.00	26.78	AAAA
ATOM	523	CA	LEU	A	66	20.252	40.151	27.850	1.00	25.41	AAAA
ATOM	524	CB	LEU	A	66	20.479	40.035	29.356	1.00	25.75	AAAA
ATOM	525	CG	LEU	A	66	21.809	39.350	29.689	1.00	25.62	AAAA
ATOM	526	CD1	LEU	A	66	22.951	40.216	29.228	1.00	23.52	AAAA
ATOM	527	CD2	LEU	A	66	21.903	39.111	31.184	1.00	27.39	AAAA
ATOM	528	C	LEU	A	66	20.407	38.777	27.248	1.00	24.76	AAAA
ATOM	529	O	LEU	A	66	19.713	37.842	27.644	1.00	24.37	AAAA
ATOM	530	N	ILE	A	67	21.310	38.648	26.287	1.00	25.48	AAAA
ATOM	531	CA	ILE	A	67	21.565	37.351	25.664	1.00	25.99	AAAA
ATOM	532	CB	ILE	A	67	21.321	37.426	24.158	1.00	23.50	AAAA
ATOM	533	CG2	ILE	A	67	21.594	36.074	23.524	1.00	23.32	AAAA
ATOM	534	CG1	ILE	A	67	19.864	37.838	23.920	1.00	22.06	AAAA
ATOM	535	CD1	ILE	A	67	19.483	37.950	22.498	1.00	20.34	AAAA
ATOM	536	C	ILE	A	67	23.017	36.999	25.967	1.00	28.03	AAAA
ATOM	537	O	ILE	A	67	23.928	37.600	25.409	1.00	31.48	AAAA
ATOM	538	N	ALA	A	68	23.251	36.033	26.849	1.00	28.24	AAAA
ATOM	539	CA	ALA	A	68	24.630	35.739	27.205	1.00	29.66	AAAA
ATOM	540	CB	ALA	A	68	25.064	36.712	28.280	1.00	30.16	AAAA
ATOM	541	C	ALA	A	68	24.952	34.327	27.656	1.00	31.21	AAAA
ATOM	542	O	ALA	A	68	24.115	33.631	28.212	1.00	32.43	AAAA
ATOM	543	N	LEU	A	69	26.198	33.929	27.429	1.00	34.40	AAAA
ATOM	544	CA	LEU	A	69	26.697	32.611	27.818	1.00	36.99	AAAA
ATOM	545	CB	LEU	A	69	26.777	32.528	29.348	1.00	36.64	AAAA
ATOM	546	CG	LEU	A	69	27.783	33.526	29.950	1.00	36.18	AAAA
ATOM	547	CD1	LEU	A	69	27.352	33.930	31.327	1.00	34.77	AAAA
ATOM	548	CD2	LEU	A	69	29.167	32.908	29.981	1.00	34.41	AAAA
ATOM	549	C	LEU	A	69	25.855	31.472	27.261	1.00	38.89	AAAA
ATOM	550	O	LEU	A	69	25.647	30.445	27.912	1.00	40.53	AAAA
ATOM	551	N	ASN	A	70	25.370	31.668	26.041	1.00	38.37	AAAA
ATOM	552	CA	ASN	A	70	24.566	30.668	25.363	1.00	37.18	AAAA
ATOM	553	CB	ASN	A	70	23.432	31.337	24.591	1.00	37.49	AAAA
ATOM	554	CG	ASN	A	70	22.385	31.909	25.485	1.00	36.89	AAAA
ATOM	555	OD1	ASN	A	70	21.659	31.175	26.131	1.00	39.48	AAAA
ATOM	556	ND2	ASN	A	70	22.292	33.231	25.528	1.00	37.89	AAAA
ATOM	557	C	ASN	A	70	25.445	29.949	24.361	1.00	36.17	AAAA
ATOM	558	O	ASN	A	70	26.190	30.586	23.624	1.00	35.77	AAAA
ATOM	559	N	THR	A	71	25.359	28.628	24.309	1.00	35.84	AAAA
ATOM	560	CA	THR	A	71	26.154	27.906	23.320	1.00	36.64	AAAA
ATOM	561	CB	THR	A	71	26.958	26.742	23.955	1.00	35.69	AAAA
ATOM	562	OG1	THR	A	71	26.088	25.930	24.753	1.00	40.21	AAAA
ATOM	563	CG2	THR	A	71	28.080	27.285	24.821	1.00	30.98	AAAA
ATOM	564	C	THR	A	71	25.232	27.372	22.236	1.00	36.41	AAAA
ATOM	565	O	THR	A	71	25.685	26.803	21.254	1.00	37.39	AAAA
ATOM	566	N	VAL	A	72	23.928	27.567	22.420	1.00	37.83	AAAA
ATOM	567	CA	VAL	A	72	22.932	27.118	21.447	1.00	37.68	AAAA
ATOM	568	CB	VAL	A	72	21.496	27.490	21.915	1.00	38.29	AAAA
ATOM	569	CG1	VAL	A	72	21.324	29.000	21.952	1.00	36.04	AAAA
ATOM	570	CG2	VAL	A	72	20.466	26.850	21.011	1.00	36.62	AAAA
ATOM	571	C	VAL	A	72	23.236	27.771	20.097	1.00	38.52	AAAA
ATOM	572	O	VAL	A	72	23.680	28.910	20.042	1.00	38.68	AAAA
ATOM	573	N	GLU	A	73	22.995	27.058	19.007	1.00	39.42	AAAA
ATOM	574	CA	GLU	A	73	23.299	27.595	17.690	1.00	40.33	AAAA
ATOM	575	CB	GLU	A	73	23.230	26.469	16.643	1.00	44.37	AAAA
ATOM	576	CG	GLU	A	73	23.747	26.885	15.252	1.00	47.89	AAAA
ATOM	577	CD	GLU	A	73	23.755	25.751	14.231	1.00	50.31	AAAA
ATOM	578	OE1	GLU	A	73	24.490	24.761	14.424	1.00	50.85	AAAA
ATOM	579	OE2	GLU	A	73	23.027	25.853	13.220	1.00	55.22	AAAA
ATOM	580	C	GLU	A	73	22.442	28.781	17.224	1.00	39.15	AAAA
ATOM	581	O	GLU	A	73	22.961	29.720	16.595	1.00	36.44	AAAA
ATOM	582	N	ARG	A	74	21.148	28.747	17.542	1.00	36.87	AAAA
ATOM	583	CA	ARG	A	74	20.227	29.793	17.106	1.00	37.15	AAAA
ATOM	584	CB	ARG	A	74	19.486	29.308	15.851	1.00	39.13	AAAA
ATOM	585	CG	ARG	A	74	18.471	30.266	15.231	1.00	43.40	AAAA
ATOM	586	CD	ARG	A	74	17.691	29.541	14.111	1.00	47.93	AAAA
ATOM	587	NE	ARG	A	74	16.674	30.367	13.448	1.00	50.73	AAAA
ATOM	588	CZ	ARG	A	74	16.911	31.193	12.423	1.00	52.23	AAAA
ATOM	589	NH1	ARG	A	74	18.140	31.313	11.925	1.00	49.68	AAAA
ATOM	590	NH2	ARG	A	74	15.916	31.909	11.895	1.00	51.76	AAAA
ATOM	591	C	ARG	A	74	19.210	30.216	18.161	1.00	36.02	AAAA
ATOM	592	O	ARG	A	74	18.648	29.387	18.867	1.00	36.41	AAAA
ATOM	593	N	ILE	A	75	18.984	31.518	18.261	1.00	35.04	AAAA
ATOM	594	CA	ILE	A	75	18.012	32.085	19.195	1.00	35.06	AAAA
ATOM	595	CB	ILE	A	75	18.686	33.071	20.182	1.00	32.14	AAAA

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ATOM	596	CG2	ILE	A	75	17.648	33.663	21.108	1.00	29.33	AAAA
ATOM	597	CG1	ILE	A	75	19.770	32.351	20.977	1.00	30.01	AAAA
ATOM	598	CD1	ILE	A	75	20.450	33.236	21.991	1.00	29.88	AAAA
ATOM	599	C	ILE	A	75	17.037	32.842	18.283	1.00	34.90	AAAA
ATOM	600	O	ILE	A	75	17.243	34.009	17.974	1.00	34.50	AAAA
ATOM	601	N	PRO	A	76	15.961	32.174	17.855	1.00	34.93	AAAA
ATOM	602	CD	PRO	A	76	15.618	30.827	18.336	1.00	35.51	AAAA
ATOM	603	CA	PRO	A	76	14.914	32.679	16.967	1.00	36.26	AAAA
ATOM	604	CB	PRO	A	76	14.147	31.412	16.605	1.00	35.71	AAAA
ATOM	605	CG	PRO	A	76	14.178	30.672	17.882	1.00	37.43	AAAA
ATOM	606	C	PRO	A	76	13.984	33.801	17.393	1.00	36.40	AAAA
ATOM	607	O	PRO	A	76	12.773	33.661	17.286	1.00	37.50	AAAA
ATOM	608	N	LEU	A	77	14.534	34.915	17.860	1.00	36.86	AAAA
ATOM	609	CA	LEU	A	77	13.704	36.053	18.240	1.00	36.14	AAAA
ATOM	610	CB	LEU	A	77	14.501	37.015	19.102	1.00	34.89	AAAA
ATOM	611	CG	LEU	A	77	14.759	36.557	20.529	1.00	33.15	AAAA
ATOM	612	CD1	LEU	A	77	15.859	37.405	21.160	1.00	33.14	AAAA
ATOM	613	CD2	LEU	A	77	13.476	36.666	21.309	1.00	33.49	AAAA
ATOM	614	C	LEU	A	77	13.314	36.735	16.940	1.00	37.63	AAAA
ATOM	615	O	LEU	A	77	13.660	37.886	16.707	1.00	36.37	AAAA
ATOM	616	N	GLU	A	78	12.581	36.009	16.100	1.00	40.28	AAAA
ATOM	617	CA	GLU	A	78	12.180	36.494	14.779	1.00	43.01	AAAA
ATOM	618	CB	GLU	A	78	11.727	35.303	13.910	1.00	42.62	AAAA
ATOM	619	CG	GLU	A	78	12.711	34.144	13.868	1.00	43.99	AAAA
ATOM	620	CD	GLU	A	78	12.234	32.971	13.011	1.00	47.30	AAAA
ATOM	621	OE1	GLU	A	78	11.038	32.615	13.069	1.00	48.98	AAAA
ATOM	622	OE2	GLU	A	78	13.067	32.385	12.287	1.00	50.13	AAAA
ATOM	623	C	GLU	A	78	11.110	37.588	14.709	1.00	43.60	AAAA
ATOM	624	O	GLU	A	78	10.948	38.211	13.665	1.00	46.18	AAAA
ATOM	625	N	ASN	A	79	10.392	37.841	15.798	1.00	44.48	AAAA
ATOM	626	CA	ASN	A	79	9.329	38.838	15.759	1.00	43.41	AAAA
ATOM	627	CB	ASN	A	79	8.000	38.113	15.882	1.00	43.83	AAAA
ATOM	628	CG	ASN	A	79	7.811	37.084	14.779	1.00	46.36	AAAA
ATOM	629	OD1	ASN	A	79	7.762	37.434	13.598	1.00	48.25	AAAA
ATOM	630	ND2	ASN	A	79	7.720	35.813	15.153	1.00	44.27	AAAA
ATOM	631	C	ASN	A	79	9.425	39.988	16.761	1.00	44.02	AAAA
ATOM	632	O	ASN	A	79	8.537	40.836	16.849	1.00	43.65	AAAA
ATOM	633	N	LEU	A	80	10.515	40.028	17.511	1.00	43.88	AAAA
ATOM	634	CA	LEU	A	80	10.717	41.107	18.460	1.00	43.22	AAAA
ATOM	635	CB	LEU	A	80	11.958	40.815	19.297	1.00	42.11	AAAA
ATOM	636	CG	LEU	A	80	12.430	41.913	20.237	1.00	40.79	AAAA
ATOM	637	CD1	LEU	A	80	11.425	42.093	21.349	1.00	38.67	AAAA
ATOM	638	CD2	LEU	A	80	13.792	41.544	20.780	1.00	39.37	AAAA
ATOM	639	C	LEU	A	80	10.909	42.398	17.654	1.00	43.96	AAAA
ATOM	640	O	LEU	A	80	11.915	42.556	16.963	1.00	42.78	AAAA
ATOM	641	N	GLN	A	81	9.948	43.317	17.742	1.00	46.68	AAAA
ATOM	642	CA	GLN	A	81	10.024	44.584	17.000	1.00	46.75	AAAA
ATOM	643	CB	GLN	A	81	8.662	44.962	16.436	1.00	47.28	AAAA
ATOM	644	CG	GLN	A	81	7.885	43.796	15.902	1.00	51.74	AAAA
ATOM	645	CD	GLN	A	81	6.488	44.183	15.511	1.00	52.76	AAAA
ATOM	646	OE1	GLN	A	81	6.276	44.834	14.488	1.00	52.29	AAAA
ATOM	647	NE2	GLN	A	81	5.517	43.794	16.333	1.00	53.29	AAAA
ATOM	648	C	GLN	A	81	10.497	45.738	17.852	1.00	47.17	AAAA
ATOM	649	O	GLN	A	81	11.083	46.701	17.342	1.00	46.16	AAAA
ATOM	650	N	ILE	A	82	10.254	45.641	19.156	1.00	48.09	AAAA
ATOM	651	CA	ILE	A	82	10.627	46.728	20.050	1.00	47.37	AAAA
ATOM	652	CB	ILE	A	82	9.409	47.659	20.250	1.00	47.03	AAAA
ATOM	653	CG2	ILE	A	82	8.186	46.839	20.596	1.00	44.21	AAAA
ATOM	654	CG1	ILE	A	82	9.678	48.674	21.353	1.00	48.72	AAAA
ATOM	655	CD1	ILE	A	82	8.616	49.741	21.453	1.00	52.12	AAAA
ATOM	656	C	ILE	A	82	11.199	46.368	21.424	1.00	47.37	AAAA
ATOM	657	O	ILE	A	82	10.742	45.444	22.096	1.00	46.42	AAAA
ATOM	658	N	ILE	A	83	12.214	47.127	21.817	1.00	46.93	AAAA
ATOM	659	CA	ILE	A	83	12.857	46.992	23.112	1.00	47.59	AAAA
ATOM	660	CB	ILE	A	83	14.343	46.623	22.984	1.00	46.57	AAAA
ATOM	661	CG2	ILE	A	83	15.011	46.692	24.349	1.00	45.45	AAAA
ATOM	662	CG1	ILE	A	83	14.481	45.225	22.388	1.00	45.78	AAAA
ATOM	663	CD1	ILE	A	83	15.904	44.811	22.144	1.00	46.11	AAAA
ATOM	664	C	ILE	A	83	12.752	48.393	23.693	1.00	49.54	AAAA
ATOM	665	O	ILE	A	83	13.534	49.279	23.334	1.00	50.04	AAAA
ATOM	666	N	ARG	A	84	11.779	48.602	24.576	1.00	51.41	AAAA
ATOM	667	CA	ARG	A	84	11.565	49.918	25.174	1.00	52.91	AAAA
ATOM	668	CB	ARG	A	84	10.291	49.890	26.012	1.00	54.08	AAAA
ATOM	669	CG	ARG	A	84	9.050	49.552	25.196	1.00	57.10	AAAA
ATOM	670	CD	ARG	A	84	7.856	49.239	26.085	1.00	60.71	AAAA

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ATOM	671	NE	ARG	A	84	6.712	48.738	25.323	1.00	63.23	AAAA
ATOM	672	CZ	ARG	A	84	6.110	49.415	24.348	1.00	64.01	AAAA
ATOM	673	NH1	ARG	A	84	6.538	50.625	24.007	1.00	62.94	AAAA
ATOM	674	NH2	ARG	A	84	5.076	48.880	23.713	1.00	64.10	AAAA
ATOM	675	C	ARG	A	84	12.753	50.388	26.011	1.00	53.35	AAAA
ATOM	676	O	ARG	A	84	13.241	51.512	25.855	1.00	52.81	AAAA
ATOM	677	N	GLY	A	85	13.232	49.519	26.889	1.00	54.22	AAAA
ATOM	678	CA	GLY	A	85	14.357	49.885	27.716	1.00	54.55	AAAA
ATOM	679	C	GLY	A	85	13.908	50.709	28.900	1.00	55.74	AAAA
ATOM	680	O	GLY	A	85	14.578	51.668	29.277	1.00	54.93	AAAA
ATOM	681	N	ASN	A	86	12.766	50.350	29.478	1.00	56.91	AAAA
ATOM	682	CA	ASN	A	86	12.261	51.072	30.637	1.00	60.87	AAAA
ATOM	683	CB	ASN	A	86	10.974	50.440	31.174	1.00	61.88	AAAA
ATOM	684	CG	ASN	A	86	9.830	50.506	30.185	1.00	63.80	AAAA
ATOM	685	OD1	ASN	A	86	9.711	51.466	29.419	1.00	65.19	AAAA
ATOM	686	ND2	ASN	A	86	8.963	49.496	30.212	1.00	63.96	AAAA
ATOM	687	C	ASN	A	86	13.328	50.983	31.710	1.00	62.78	AAAA
ATOM	688	O	ASN	A	86	13.601	51.953	32.413	1.00	64.09	AAAA
ATOM	689	N	MET	A	87	13.928	49.801	31.819	1.00	64.05	AAAA
ATOM	690	CA	MET	A	87	14.970	49.536	32.798	1.00	64.43	AAAA
ATOM	691	CB	MET	A	87	14.411	48.576	33.872	1.00	65.87	AAAA
ATOM	692	CG	MET	A	87	12.999	49.026	34.375	1.00	70.44	AAAA
ATOM	693	SD	MET	A	87	12.282	48.384	35.950	1.00	72.95	AAAA
ATOM	694	CE	MET	A	87	11.744	46.736	35.421	1.00	74.32	AAAA
ATOM	695	C	MET	A	87	16.164	48.960	32.029	1.00	63.31	AAAA
ATOM	696	O	MET	A	87	15.987	48.153	31.121	1.00	63.10	AAAA
ATOM	697	N	TYR	A	88	17.373	49.404	32.369	1.00	62.65	AAAA
ATOM	698	CA	TYR	A	88	18.593	48.963	31.682	1.00	61.18	AAAA
ATOM	699	CB	TYR	A	88	19.588	50.126	31.558	1.00	63.80	AAAA
ATOM	700	CG	TYR	A	88	19.101	51.351	30.807	1.00	65.69	AAAA
ATOM	701	CD1	TYR	A	88	19.924	52.471	30.666	1.00	66.17	AAAA
ATOM	702	CE1	TYR	A	88	19.487	53.608	29.994	1.00	67.22	AAAA
ATOM	703	CD2	TYR	A	88	17.824	51.401	30.250	1.00	66.61	AAAA
ATOM	704	CE2	TYR	A	88	17.376	52.536	29.574	1.00	68.05	AAAA
ATOM	705	CZ	TYR	A	88	18.211	53.636	29.449	1.00	68.49	AAAA
ATOM	706	OH	TYR	A	88	17.766	54.760	28.783	1.00	67.94	AAAA
ATOM	707	C	TYR	A	88	19.334	47.801	32.340	1.00	58.76	AAAA
ATOM	708	O	TYR	A	88	18.921	47.285	33.373	1.00	59.04	AAAA
ATOM	709	N	TYR	A	89	20.442	47.411	31.716	1.00	56.09	AAAA
ATOM	710	CA	TYR	A	89	21.313	46.343	32.201	1.00	54.47	AAAA
ATOM	711	CB	TYR	A	89	21.447	45.229	31.162	1.00	49.44	AAAA
ATOM	712	CG	TYR	A	89	22.490	44.196	31.533	1.00	43.39	AAAA
ATOM	713	CD1	TYR	A	89	22.256	43.291	32.555	1.00	41.39	AAAA
ATOM	714	CE1	TYR	A	89	23.236	42.402	32.967	1.00	39.89	AAAA
ATOM	715	CD2	TYR	A	89	23.740	44.180	30.917	1.00	41.69	AAAA
ATOM	716	CE2	TYR	A	89	24.735	43.291	31.320	1.00	39.28	AAAA
ATOM	717	CZ	TYR	A	89	24.477	42.403	32.355	1.00	39.93	AAAA
ATOM	718	OH	TYR	A	89	25.454	41.533	32.815	1.00	37.70	AAAA
ATOM	719	C	TYR	A	89	22.693	46.956	32.426	1.00	57.46	AAAA
ATOM	720	O	TYR	A	89	23.248	47.594	31.527	1.00	58.38	AAAA
ATOM	721	N	GLU	A	90	23.256	46.776	33.614	1.00	59.87	AAAA
ATOM	722	CA	GLU	A	90	24.577	47.336	33.894	1.00	62.35	AAAA
ATOM	723	CB	GLU	A	90	25.618	46.669	32.986	1.00	62.78	AAAA
ATOM	724	CG	GLU	A	90	27.065	46.887	33.394	1.00	65.44	AAAA
ATOM	725	CD	GLU	A	90	28.042	46.545	32.275	1.00	67.34	AAAA
ATOM	726	OE1	GLU	A	90	27.927	45.438	31.702	1.00	67.54	AAAA
ATOM	727	OE2	GLU	A	90	28.926	47.381	31.972	1.00	66.26	AAAA
ATOM	728	C	GLU	A	90	24.582	48.865	33.673	1.00	63.40	AAAA
ATOM	729	O	GLU	A	90	25.555	49.434	33.169	1.00	63.23	AAAA
ATOM	730	N	ASN	A	91	23.475	49.514	34.032	1.00	63.77	AAAA
ATOM	731	CA	ASN	A	91	23.334	50.970	33.916	1.00	64.49	AAAA
ATOM	732	CB	ASN	A	91	24.480	51.658	34.678	1.00	65.78	AAAA
ATOM	733	CG	ASN	A	91	24.387	51.470	36.189	1.00	66.86	AAAA
ATOM	734	OD1	ASN	A	91	25.385	51.591	36.900	1.00	67.90	AAAA
ATOM	735	ND2	ASN	A	91	23.186	51.192	36.685	1.00	66.86	AAAA
ATOM	736	C	ASN	A	91	23.220	51.604	32.518	1.00	63.51	AAAA
ATOM	737	O	ASN	A	91	22.543	52.623	32.357	1.00	62.67	AAAA
ATOM	738	N	SER	A	92	23.859	51.022	31.509	1.00	62.59	AAAA
ATOM	739	CA	SER	A	92	23.812	51.618	30.171	1.00	61.36	AAAA
ATOM	740	CB	SER	A	92	25.235	51.901	29.680	1.00	62.19	AAAA
ATOM	741	OG	SER	A	92	25.880	52.885	30.464	1.00	67.78	AAAA
ATOM	742	C	SER	A	92	23.090	50.893	29.034	1.00	59.28	AAAA
ATOM	743	O	SER	A	92	22.708	51.534	28.056	1.00	59.15	AAAA
ATOM	744	N	TYR	A	93	22.881	49.585	29.152	1.00	56.42	AAAA
ATOM	745	CA	TYR	A	93	22.300	48.836	28.043	1.00	52.13	AAAA

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ATOM	746	CB	TYR	A	93	23.231	47.679	27.698	1.00	52.61	AAAA
ATOM	747	CG	TYR	A	93	24.665	48.097	27.554	1.00	53.05	AAAA
ATOM	748	CD1	TYR	A	93	25.599	47.807	28.547	1.00	53.91	AAAA
ATOM	749	CE1	TYR	A	93	26.918	48.220	28.431	1.00	54.47	AAAA
ATOM	750	CD2	TYR	A	93	25.086	48.813	26.439	1.00	53.37	AAAA
ATOM	751	CE2	TYR	A	93	26.399	49.232	26.312	1.00	55.19	AAAA
ATOM	752	CZ	TYR	A	93	27.311	48.929	27.309	1.00	54.48	AAAA
ATOM	753	OH	TYR	A	93	28.619	49.311	27.158	1.00	56.08	AAAA
ATOM	754	C	TYR	A	93	20.888	48.291	28.061	1.00	50.04	AAAA
ATOM	755	O	TYR	A	93	20.430	47.722	29.053	1.00	49.81	AAAA
ATOM	756	N	ALA	A	94	20.228	48.438	26.912	1.00	47.51	AAAA
ATOM	757	CA	ALA	A	94	18.873	47.936	26.693	1.00	43.79	AAAA
ATOM	758	CB	ALA	A	94	18.095	48.908	25.820	1.00	43.44	AAAA
ATOM	759	C	ALA	A	94	19.008	46.580	25.983	1.00	41.77	AAAA
ATOM	760	O	ALA	A	94	18.089	45.752	26.006	1.00	38.68	AAAA
ATOM	761	N	LEU	A	95	20.168	46.378	25.348	1.00	39.80	AAAA
ATOM	762	CA	LEU	A	95	20.489	45.145	24.625	1.00	38.41	AAAA
ATOM	763	CB	LEU	A	95	20.215	45.296	23.124	1.00	36.65	AAAA
ATOM	764	CG	LEU	A	95	20.638	44.081	22.285	1.00	35.57	AAAA
ATOM	765	CD1	LEU	A	95	19.696	42.907	22.579	1.00	36.04	AAAA
ATOM	766	CD2	LEU	A	95	20.607	44.418	20.802	1.00	34.75	AAAA
ATOM	767	C	LEU	A	95	21.961	44.772	24.819	1.00	37.96	AAAA
ATOM	768	O	LEU	A	95	22.854	45.460	24.323	1.00	36.46	AAAA
ATOM	769	N	ALA	A	96	22.197	43.672	25.533	1.00	37.12	AAAA
ATOM	770	CA	ALA	A	96	23.543	43.185	25.804	1.00	35.22	AAAA
ATOM	771	CB	ALA	A	96	23.848	43.311	27.290	1.00	33.69	AAAA
ATOM	772	C	ALA	A	96	23.666	41.732	25.365	1.00	35.12	AAAA
ATOM	773	O	ALA	A	96	22.939	40.865	25.846	1.00	35.74	AAAA
ATOM	774	N	VAL	A	97	24.590	41.476	24.445	1.00	34.87	AAAA
ATOM	775	CA	VAL	A	97	24.830	40.133	23.920	1.00	33.29	AAAA
ATOM	776	CB	VAL	A	97	24.600	40.119	22.399	1.00	31.67	AAAA
ATOM	777	CG1	VAL	A	97	24.845	38.729	21.838	1.00	29.99	AAAA
ATOM	778	CG2	VAL	A	97	23.168	40.587	22.108	1.00	30.30	AAAA
ATOM	779	C	VAL	A	97	26.270	39.779	24.246	1.00	34.76	AAAA
ATOM	780	O	VAL	A	97	27.193	40.210	23.550	1.00	37.75	AAAA
ATOM	781	N	LEU	A	98	26.463	38.975	25.284	1.00	35.01	AAAA
ATOM	782	CA	LEU	A	98	27.807	38.649	25.737	1.00	36.69	AAAA
ATOM	783	CB	LEU	A	98	28.035	39.301	27.094	1.00	36.04	AAAA
ATOM	784	CG	LEU	A	98	27.338	40.623	27.360	1.00	35.24	AAAA
ATOM	785	CD1	LEU	A	98	27.343	40.871	28.847	1.00	33.03	AAAA
ATOM	786	CD2	LEU	A	98	28.028	41.737	26.583	1.00	33.58	AAAA
ATOM	787	C	LEU	A	98	28.243	37.206	25.897	1.00	39.42	AAAA
ATOM	788	O	LEU	A	98	27.474	36.365	26.349	1.00	40.37	AAAA
ATOM	789	N	SER	A	99	29.518	36.967	25.579	1.00	41.73	AAAA
ATOM	790	CA	SER	A	99	30.186	35.674	25.736	1.00	43.78	AAAA
ATOM	791	CB	SER	A	99	30.656	35.528	27.185	1.00	43.79	AAAA
ATOM	792	OG	SER	A	99	31.400	36.666	27.584	1.00	45.75	AAAA
ATOM	793	C	SER	A	99	29.346	34.473	25.380	1.00	44.83	AAAA
ATOM	794	O	SER	A	99	29.136	33.583	26.210	1.00	45.09	AAAA
ATOM	795	N	ASN	A	100	28.887	34.434	24.141	1.00	45.48	AAAA
ATOM	796	CA	ASN	A	100	28.038	33.350	23.711	1.00	47.27	AAAA
ATOM	797	CB	ASN	A	100	26.938	33.919	22.822	1.00	45.75	AAAA
ATOM	798	CG	ASN	A	100	25.954	34.762	23.607	1.00	45.34	AAAA
ATOM	799	OD1	ASN	A	100	25.161	34.240	24.385	1.00	45.15	AAAA
ATOM	800	ND2	ASN	A	100	26.013	36.073	23.421	1.00	46.67	AAAA
ATOM	801	C	ASN	A	100	28.765	32.197	23.036	1.00	49.78	AAAA
ATOM	802	O	ASN	A	100	28.722	32.039	21.816	1.00	49.18	AAAA
ATOM	803	N	TYR	A	101	29.432	31.393	23.861	1.00	53.86	AAAA
ATOM	804	CA	TYR	A	101	30.173	30.211	23.420	1.00	58.25	AAAA
ATOM	805	CB	TYR	A	101	31.229	30.575	22.368	1.00	58.13	AAAA
ATOM	806	CG	TYR	A	101	32.397	31.349	22.919	1.00	60.01	AAAA
ATOM	807	CD1	TYR	A	101	33.704	30.882	22.758	1.00	61.42	AAAA
ATOM	808	CE1	TYR	A	101	34.790	31.564	23.317	1.00	61.62	AAAA
ATOM	809	CD2	TYR	A	101	32.199	32.525	23.647	1.00	60.57	AAAA
ATOM	810	CE2	TYR	A	101	33.272	33.211	24.209	1.00	61.42	AAAA
ATOM	811	CZ	TYR	A	101	34.562	32.724	24.042	1.00	61.86	AAAA
ATOM	812	OH	TYR	A	101	35.617	33.390	24.613	1.00	63.11	AAAA
ATOM	813	C	TYR	A	101	30.852	29.611	24.644	1.00	60.78	AAAA
ATOM	814	O	TYR	A	101	30.619	30.060	25.768	1.00	59.24	AAAA
ATOM	815	N	ASP	A	102	31.688	28.599	24.426	1.00	65.57	AAAA
ATOM	816	CA	ASP	A	102	32.408	27.944	25.521	1.00	69.51	AAAA
ATOM	817	CB	ASP	A	102	32.021	26.462	25.606	1.00	69.63	AAAA
ATOM	818	CG	ASP	A	102	32.243	25.719	24.304	1.00	70.05	AAAA
ATOM	819	OD1	ASP	A	102	32.032	24.490	24.282	1.00	71.09	AAAA
ATOM	820	OD2	ASP	A	102	32.628	26.355	23.302	1.00	70.18	AAAA

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ATOM	821	C	ASP	A	102	33.920	28.082	25.349	1.00	71.94	AAAA
ATOM	822	O	ASP	A	102	34.479	29.168	25.524	1.00	73.10	AAAA
ATOM	823	N	ALA	A	103	34.582	26.979	25.016	1.00	74.58	AAAA
ATOM	824	CA	ALA	A	103	36.025	26.995	24.808	1.00	76.85	AAAA
ATOM	825	CB	ALA	A	103	36.643	25.712	25.352	1.00	76.89	AAAA
ATOM	826	C	ALA	A	103	36.313	27.132	23.312	1.00	78.13	AAAA
ATOM	827	O	ALA	A	103	36.608	26.143	22.638	1.00	77.63	AAAA
ATOM	828	N	ASN	A	104	36.218	28.364	22.810	1.00	80.13	AAAA
ATOM	829	CA	ASN	A	104	36.443	28.684	21.395	1.00	81.57	AAAA
ATOM	830	CB	ASN	A	104	37.911	29.072	21.151	1.00	83.37	AAAA
ATOM	831	CG	ASN	A	104	38.262	30.438	21.726	1.00	85.20	AAAA
ATOM	832	OD1	ASN	A	104	37.541	31.420	21.518	1.00	86.49	AAAA
ATOM	833	ND2	ASN	A	104	39.380	30.510	22.445	1.00	84.95	AAAA
ATOM	834	C	ASN	A	104	36.047	27.543	20.460	1.00	81.46	AAAA
ATOM	835	O	ASN	A	104	36.579	27.403	19.353	1.00	82.36	AAAA
ATOM	836	N	LYS	A	105	35.100	26.733	20.910	1.00	80.04	AAAA
ATOM	837	CA	LYS	A	105	34.633	25.605	20.130	1.00	78.24	AAAA
ATOM	838	CB	LYS	A	105	34.379	24.409	21.053	1.00	80.51	AAAA
ATOM	839	CG	LYS	A	105	34.035	23.105	20.337	1.00	82.67	AAAA
ATOM	840	CD	LYS	A	105	33.867	21.957	21.334	1.00	84.52	AAAA
ATOM	841	CE	LYS	A	105	35.165	21.677	22.087	1.00	84.21	AAAA
ATOM	842	NZ	LYS	A	105	34.979	20.675	23.174	1.00	84.79	AAAA
ATOM	843	C	LYS	A	105	33.352	25.998	19.408	1.00	75.68	AAAA
ATOM	844	O	LYS	A	105	33.373	26.347	18.223	1.00	75.44	AAAA
ATOM	845	N	THR	A	106	32.241	25.957	20.136	1.00	71.44	AAAA
ATOM	846	CA	THR	A	106	30.949	26.289	19.564	1.00	66.74	AAAA
ATOM	847	CB	THR	A	106	30.016	25.046	19.562	1.00	67.32	AAAA
ATOM	848	OG1	THR	A	106	29.647	24.700	20.904	1.00	67.36	AAAA
ATOM	849	CG2	THR	A	106	30.732	23.862	18.938	1.00	66.70	AAAA
ATOM	850	C	THR	A	106	30.284	27.435	20.315	1.00	62.38	AAAA
ATOM	851	O	THR	A	106	30.576	27.679	21.485	1.00	61.07	AAAA
ATOM	852	N	GLY	A	107	29.391	28.139	19.628	1.00	58.51	AAAA
ATOM	853	CA	GLY	A	107	28.702	29.258	20.242	1.00	52.88	AAAA
ATOM	854	C	GLY	A	107	27.511	29.739	19.438	1.00	49.01	AAAA
ATOM	855	O	GLY	A	107	27.156	29.150	18.415	1.00	48.74	AAAA
ATOM	856	N	LEU	A	108	26.885	30.808	19.916	1.00	46.00	AAAA
ATOM	857	CA	LEU	A	108	25.725	31.388	19.255	1.00	41.63	AAAA
ATOM	858	CB	LEU	A	108	25.218	32.590	20.038	1.00	39.78	AAAA
ATOM	859	CG	LEU	A	108	24.100	33.371	19.364	1.00	38.12	AAAA
ATOM	860	CD1	LEU	A	108	22.888	32.479	19.160	1.00	38.86	AAAA
ATOM	861	CD2	LEU	A	108	23.757	34.564	20.220	1.00	38.65	AAAA
ATOM	862	C	LEU	A	108	26.113	31.807	17.851	1.00	41.81	AAAA
ATOM	863	O	LEU	A	108	26.986	32.646	17.652	1.00	38.42	AAAA
ATOM	864	N	LYS	A	109	25.444	31.214	16.872	1.00	43.34	AAAA
ATOM	865	CA	LYS	A	109	25.748	31.499	15.487	1.00	43.75	AAAA
ATOM	866	CB	LYS	A	109	25.772	30.184	14.709	1.00	45.59	AAAA
ATOM	867	CG	LYS	A	109	26.421	30.262	13.353	1.00	49.19	AAAA
ATOM	868	CD	LYS	A	109	26.811	28.872	12.860	1.00	54.32	AAAA
ATOM	869	CE	LYS	A	109	25.596	27.971	12.639	1.00	56.21	AAAA
ATOM	870	NZ	LYS	A	109	24.678	28.531	11.610	0.01	55.21	AAAA
ATOM	871	C	LYS	A	109	24.773	32.485	14.855	1.00	42.98	AAAA
ATOM	872	O	LYS	A	109	25.188	33.490	14.286	1.00	43.41	AAAA
ATOM	873	N	GLU	A	110	23.479	32.219	14.968	1.00	40.78	AAAA
ATOM	874	CA	GLU	A	110	22.507	33.108	14.362	1.00	41.64	AAAA
ATOM	875	CB	GLU	A	110	21.794	32.359	13.225	1.00	42.58	AAAA
ATOM	876	CG	GLU	A	110	21.287	30.991	13.626	1.00	47.93	AAAA
ATOM	877	CD	GLU	A	110	21.196	29.993	12.464	1.00	50.42	AAAA
ATOM	878	OE1	GLU	A	110	22.241	29.706	11.831	1.00	51.30	AAAA
ATOM	879	OE2	GLU	A	110	20.080	29.482	12.199	1.00	51.75	AAAA
ATOM	880	C	GLU	A	110	21.512	33.728	15.352	1.00	40.17	AAAA
ATOM	881	O	GLU	A	110	21.019	33.061	16.255	1.00	41.50	AAAA
ATOM	882	N	LEU	A	111	21.250	35.021	15.183	1.00	37.15	AAAA
ATOM	883	CA	LEU	A	111	20.331	35.773	16.038	1.00	35.88	AAAA
ATOM	884	CB	LEU	A	111	21.149	36.680	16.971	1.00	33.00	AAAA
ATOM	885	CG	LEU	A	111	20.478	37.526	18.061	1.00	31.16	AAAA
ATOM	886	CD1	LEU	A	111	19.678	36.651	19.026	1.00	27.07	AAAA
ATOM	887	CD2	LEU	A	111	21.561	38.293	18.799	1.00	27.37	AAAA
ATOM	888	C	LEU	A	111	19.495	36.604	15.063	1.00	35.67	AAAA
ATOM	889	O	LEU	A	111	19.631	37.814	14.987	1.00	34.90	AAAA
ATOM	890	N	PRO	A	112	18.615	35.943	14.297	1.00	35.91	AAAA
ATOM	891	CD	PRO	A	112	18.319	34.504	14.426	1.00	34.45	AAAA
ATOM	892	CA	PRO	A	112	17.746	36.558	13.293	1.00	34.74	AAAA
ATOM	893	CB	PRO	A	112	17.169	35.342	12.582	1.00	34.47	AAAA
ATOM	894	CG	PRO	A	112	17.005	34.368	13.703	1.00	33.10	AAAA
ATOM	895	C	PRO	A	112	16.665	37.532	13.757	1.00	35.58	AAAA

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ATOM	896	O	PRO	A	112	15.474	37.296	13.531	1.00	37.27	AAAA
ATOM	897	N	MET	A	113	17.067	38.641	14.369	1.00	34.99	AAAA
ATOM	898	CA	MET	A	113	16.088	39.616	14.848	1.00	36.65	AAAA
ATOM	899	CB	MET	A	113	16.625	40.336	16.095	1.00	34.70	AAAA
ATOM	900	CG	MET	A	113	16.941	39.399	17.268	1.00	33.74	AAAA
ATOM	901	SD	MET	A	113	17.417	40.236	18.806	1.00	36.52	AAAA
ATOM	902	CE	MET	A	113	18.929	41.042	18.312	1.00	30.64	AAAA
ATOM	903	C	MET	A	113	15.740	40.614	13.738	1.00	38.06	AAAA
ATOM	904	O	MET	A	113	15.867	41.831	13.902	1.00	37.27	AAAA
ATOM	905	N	ARG	A	114	15.275	40.070	12.615	1.00	39.25	AAAA
ATOM	906	CA	ARG	A	114	14.925	40.848	11.424	1.00	40.45	AAAA
ATOM	907	CB	ARG	A	114	14.659	39.907	10.259	1.00	39.26	AAAA
ATOM	908	CG	ARG	A	114	13.397	39.131	10.427	1.00	39.83	AAAA
ATOM	909	CD	ARG	A	114	13.643	37.693	10.108	1.00	40.56	AAAA
ATOM	910	NE	ARG	A	114	12.440	36.888	10.258	1.00	40.35	AAAA
ATOM	911	CZ	ARG	A	114	12.416	35.575	10.079	1.00	41.43	AAAA
ATOM	912	NH1	ARG	A	114	13.534	34.935	9.751	1.00	40.24	AAAA
ATOM	913	NH2	ARG	A	114	11.281	34.906	10.208	1.00	41.08	AAAA
ATOM	914	C	ARG	A	114	13.749	41.810	11.542	1.00	40.83	AAAA
ATOM	915	O	ARG	A	114	13.365	42.429	10.552	1.00	42.04	AAAA
ATOM	916	N	ASN	A	115	13.178	41.935	12.735	1.00	40.74	AAAA
ATOM	917	CA	ASN	A	115	12.066	42.852	12.953	1.00	40.11	AAAA
ATOM	918	CB	ASN	A	115	10.797	42.073	13.280	1.00	40.28	AAAA
ATOM	919	CG	ASN	A	115	10.284	41.289	12.105	1.00	39.74	AAAA
ATOM	920	OD1	ASN	A	115	9.645	40.251	12.269	1.00	40.28	AAAA
ATOM	921	ND2	ASN	A	115	10.549	41.786	10.905	1.00	41.06	AAAA
ATOM	922	C	ASN	A	115	12.384	43.812	14.095	1.00	41.55	AAAA
ATOM	923	O	ASN	A	115	11.530	44.577	14.538	1.00	39.96	AAAA
ATOM	924	N	LEU	A	116	13.617	43.766	14.581	1.00	43.33	AAAA
ATOM	925	CA	LEU	A	116	13.991	44.646	15.667	1.00	44.32	AAAA
ATOM	926	CB	LEU	A	116	15.260	44.159	16.357	1.00	44.21	AAAA
ATOM	927	CG	LEU	A	116	15.627	44.944	17.616	1.00	44.20	AAAA
ATOM	928	CD1	LEU	A	116	14.439	44.966	18.575	1.00	42.58	AAAA
ATOM	929	CD2	LEU	A	116	16.853	44.311	18.265	1.00	45.12	AAAA
ATOM	930	C	LEU	A	116	14.215	46.004	15.058	1.00	46.03	AAAA
ATOM	931	O	LEU	A	116	15.335	46.367	14.684	1.00	45.09	AAAA
ATOM	932	N	GLN	A	117	13.134	46.761	14.955	1.00	48.45	AAAA
ATOM	933	CA	GLN	A	117	13.224	48.077	14.367	1.00	51.34	AAAA
ATOM	934	CB	GLN	A	117	11.978	48.367	13.542	1.00	51.64	AAAA
ATOM	935	CG	GLN	A	117	12.150	48.039	12.064	1.00	53.38	AAAA
ATOM	936	CD	GLN	A	117	11.135	47.037	11.580	1.00	54.82	AAAA
ATOM	937	OE1	GLN	A	117	10.084	46.860	12.193	1.00	57.17	AAAA
ATOM	938	NE2	GLN	A	117	11.431	46.386	10.467	1.00	55.76	AAAA
ATOM	939	C	GLN	A	117	13.465	49.198	15.353	1.00	52.63	AAAA
ATOM	940	O	GLN	A	117	13.963	50.254	14.967	1.00	52.61	AAAA
ATOM	941	N	GLU	A	118	13.148	48.985	16.626	1.00	53.82	AAAA
ATOM	942	CA	GLU	A	118	13.370	50.071	17.569	1.00	55.04	AAAA
ATOM	943	CB	GLU	A	118	12.171	51.021	17.523	1.00	57.91	AAAA
ATOM	944	CG	GLU	A	118	12.463	52.382	18.129	1.00	61.74	AAAA
ATOM	945	CD	GLU	A	118	11.484	53.447	17.692	1.00	64.10	AAAA
ATOM	946	OE1	GLU	A	118	11.688	54.617	18.082	1.00	68.14	AAAA
ATOM	947	OE2	GLU	A	118	10.518	53.125	16.963	1.00	64.36	AAAA
ATOM	948	C	GLU	A	118	13.728	49.786	19.032	1.00	53.78	AAAA
ATOM	949	O	GLU	A	118	13.185	48.893	19.688	1.00	52.95	AAAA
ATOM	950	N	ILE	A	119	14.668	50.586	19.518	1.00	52.65	AAAA
ATOM	951	CA	ILE	A	119	15.132	50.547	20.892	1.00	52.49	AAAA
ATOM	952	CB	ILE	A	119	16.615	50.131	20.980	1.00	52.29	AAAA
ATOM	953	CG2	ILE	A	119	17.114	50.286	22.407	1.00	52.17	AAAA
ATOM	954	CG1	ILE	A	119	16.769	48.681	20.519	1.00	51.46	AAAA
ATOM	955	CD1	ILE	A	119	18.197	48.207	20.467	1.00	49.83	AAAA
ATOM	956	C	ILE	A	119	14.961	51.987	21.382	1.00	51.82	AAAA
ATOM	957	O	ILE	A	119	15.819	52.845	21.148	1.00	50.57	AAAA
ATOM	958	N	LEU	A	120	13.831	52.235	22.041	1.00	52.16	AAAA
ATOM	959	CA	LEU	A	120	13.477	53.553	22.559	1.00	52.96	AAAA
ATOM	960	CB	LEU	A	120	12.142	53.481	23.302	1.00	52.52	AAAA
ATOM	961	CG	LEU	A	120	10.950	53.124	22.403	1.00	55.17	AAAA
ATOM	962	CD1	LEU	A	120	9.685	52.961	23.236	1.00	54.68	AAAA
ATOM	963	CD2	LEU	A	120	10.763	54.212	21.346	1.00	55.00	AAAA
ATOM	964	C	LEU	A	120	14.528	54.186	23.450	1.00	53.51	AAAA
ATOM	965	O	LEU	A	120	14.895	55.341	23.245	1.00	54.88	AAAA
ATOM	966	N	HIS	A	121	15.010	53.445	24.441	1.00	54.15	AAAA
ATOM	967	CA	HIS	A	121	16.032	53.973	25.340	1.00	53.74	AAAA
ATOM	968	CB	HIS	A	121	15.383	54.464	26.640	1.00	55.83	AAAA
ATOM	969	CG	HIS	A	121	14.777	55.835	26.530	1.00	59.19	AAAA
ATOM	970	CD2	HIS	A	121	13.486	56.245	26.554	1.00	58.69	AAAA

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ATOM	971	ND1	HIS	A	121	15.535	56.971	26.325	1.00	58.98	AAAA
ATOM	972	CE1	HIS	A	121	14.738	58.019	26.221	1.00	59.94	AAAA
ATOM	973	NE2	HIS	A	121	13.489	57.606	26.356	1.00	60.70	AAAA
ATOM	974	C	HIS	A	121	17.136	52.963	25.642	1.00	52.79	AAAA
ATOM	975	O	HIS	A	121	16.928	51.755	25.563	1.00	52.60	AAAA
ATOM	976	N	GLY	A	122	18.316	53.472	25.977	1.00	51.58	AAAA
ATOM	977	CA	GLY	A	122	19.441	52.607	26.287	1.00	49.46	AAAA
ATOM	978	C	GLY	A	122	20.344	52.341	25.095	1.00	48.83	AAAA
ATOM	979	O	GLY	A	122	19.961	52.564	23.945	1.00	50.04	AAAA
ATOM	980	N	ALA	A	123	21.553	51.868	25.371	1.00	46.58	AAAA
ATOM	981	CA	ALA	A	123	22.511	51.554	24.324	1.00	43.97	AAAA
ATOM	982	CB	ALA	A	123	23.882	52.018	24.737	1.00	45.29	AAAA
ATOM	983	C	ALA	A	123	22.536	50.050	24.016	1.00	43.97	AAAA
ATOM	984	O	ALA	A	123	21.761	49.274	24.580	1.00	42.79	AAAA
ATOM	985	N	VAL	A	124	23.441	49.655	23.121	1.00	43.46	AAAA
ATOM	986	CA	VAL	A	124	23.593	48.273	22.696	1.00	43.01	AAAA
ATOM	987	CB	VAL	A	124	23.090	48.110	21.247	1.00	44.05	AAAA
ATOM	988	CG1	VAL	A	124	23.571	46.796	20.651	1.00	42.82	AAAA
ATOM	989	CG2	VAL	A	124	21.567	48.177	21.228	1.00	44.78	AAAA
ATOM	990	C	VAL	A	124	25.053	47.834	22.778	1.00	44.24	AAAA
ATOM	991	O	VAL	A	124	25.947	48.580	22.395	1.00	45.42	AAAA
ATOM	992	N	ARG	A	125	25.295	46.628	23.287	1.00	44.70	AAAA
ATOM	993	CA	ARG	A	125	26.657	46.112	23.392	1.00	44.80	AAAA
ATOM	994	CB	ARG	A	125	27.206	46.312	24.804	1.00	46.07	AAAA
ATOM	995	CG	ARG	A	125	28.604	45.705	25.023	1.00	46.93	AAAA
ATOM	996	CD	ARG	A	125	29.023	45.821	26.491	1.00	47.55	AAAA
ATOM	997	NE	ARG	A	125	30.007	44.817	26.889	1.00	47.14	AAAA
ATOM	998	CZ	ARG	A	125	29.952	44.158	28.045	1.00	48.96	AAAA
ATOM	999	NH1	ARG	A	125	28.967	44.403	28.902	1.00	46.39	AAAA
ATOM	1000	NH2	ARG	A	125	30.864	43.243	28.343	1.00	47.92	AAAA
ATOM	1001	C	ARG	A	125	26.768	44.636	23.035	1.00	44.45	AAAA
ATOM	1002	O	ARG	A	125	25.948	43.821	23.462	1.00	43.43	AAAA
ATOM	1003	N	PHE	A	126	27.798	44.316	22.251	1.00	43.85	AAAA
ATOM	1004	CA	PHE	A	126	28.100	42.955	21.816	1.00	43.12	AAAA
ATOM	1005	CB	PHE	A	126	27.945	42.828	20.297	1.00	39.41	AAAA
ATOM	1006	CG	PHE	A	126	26.524	42.672	19.837	1.00	40.10	AAAA
ATOM	1007	CD1	PHE	A	126	25.634	43.742	19.888	1.00	40.57	AAAA
ATOM	1008	CD2	PHE	A	126	26.057	41.435	19.391	1.00	39.41	AAAA
ATOM	1009	CE1	PHE	A	126	24.295	43.577	19.502	1.00	39.94	AAAA
ATOM	1010	CE2	PHE	A	126	24.731	41.263	19.008	1.00	38.84	AAAA
ATOM	1011	CZ	PHE	A	126	23.846	42.337	19.064	1.00	38.63	AAAA
ATOM	1012	C	PHE	A	126	29.551	42.643	22.199	1.00	45.14	AAAA
ATOM	1013	O	PHE	A	126	30.448	43.437	21.924	1.00	46.12	AAAA
ATOM	1014	N	SER	A	127	29.796	41.494	22.823	1.00	46.21	AAAA
ATOM	1015	CA	SER	A	127	31.165	41.150	23.204	1.00	46.54	AAAA
ATOM	1016	CB	SER	A	127	31.524	41.783	24.547	1.00	46.20	AAAA
ATOM	1017	OG	SER	A	127	30.940	43.062	24.678	1.00	49.70	AAAA
ATOM	1018	C	SER	A	127	31.411	39.656	23.311	1.00	47.29	AAAA
ATOM	1019	O	SER	A	127	30.585	38.912	23.836	1.00	47.89	AAAA
ATOM	1020	N	ASN	A	128	32.569	39.231	22.825	1.00	47.87	AAAA
ATOM	1021	CA	ASN	A	128	32.973	37.833	22.884	1.00	48.54	AAAA
ATOM	1022	CB	ASN	A	128	33.331	37.455	24.327	1.00	50.53	AAAA
ATOM	1023	CG	ASN	A	128	34.305	38.436	24.965	1.00	51.54	AAAA
ATOM	1024	OD1	ASN	A	128	33.903	39.423	25.588	1.00	52.05	AAAA
ATOM	1025	ND2	ASN	A	128	35.591	38.175	24.800	1.00	52.96	AAAA
ATOM	1026	C	ASN	A	128	31.938	36.852	22.336	1.00	47.90	AAAA
ATOM	1027	O	ASN	A	128	31.571	35.880	22.999	1.00	49.89	AAAA
ATOM	1028	N	ASN	A	129	31.462	37.123	21.128	1.00	45.18	AAAA
ATOM	1029	CA	ASN	A	129	30.510	36.257	20.453	1.00	42.56	AAAA
ATOM	1030	CB	ASN	A	129	29.265	37.042	20.055	1.00	42.55	AAAA
ATOM	1031	CG	ASN	A	129	28.513	37.578	21.247	1.00	42.61	AAAA
ATOM	1032	OD1	ASN	A	129	27.933	36.821	22.020	1.00	40.20	AAAA
ATOM	1033	ND2	ASN	A	129	28.524	38.897	21.407	1.00	42.72	AAAA
ATOM	1034	C	ASN	A	129	31.259	35.808	19.205	1.00	42.13	AAAA
ATOM	1035	O	ASN	A	129	30.905	36.179	18.091	1.00	42.13	AAAA
ATOM	1036	N	PRO	A	130	32.312	34.998	19.384	1.00	41.75	AAAA
ATOM	1037	CD	PRO	A	130	32.695	34.366	20.660	1.00	40.32	AAAA
ATOM	1038	CA	PRO	A	130	33.142	34.491	18.287	1.00	41.91	AAAA
ATOM	1039	CB	PRO	A	130	34.205	33.675	19.014	1.00	40.72	AAAA
ATOM	1040	CG	PRO	A	130	33.467	33.154	20.204	1.00	39.88	AAAA
ATOM	1041	C	PRO	A	130	32.473	33.683	17.178	1.00	43.48	AAAA
ATOM	1042	O	PRO	A	130	33.123	33.356	16.197	1.00	47.56	AAAA
ATOM	1043	N	ALA	A	131	31.194	33.358	17.308	1.00	42.19	AAAA
ATOM	1044	CA	ALA	A	131	30.544	32.565	16.279	1.00	40.90	AAAA
ATOM	1045	CB	ALA	A	131	30.122	31.216	16.857	1.00	39.32	AAAA

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ATOM	1046	C	ALA	A	131	29.343	33.272	15.668	1.00	43.07	AAAA
ATOM	1047	O	ALA	A	131	28.790	32.820	14.655	1.00	43.46	AAAA
ATOM	1048	N	LEU	A	132	28.942	34.385	16.277	1.00	42.76	AAAA
ATOM	1049	CA	LEU	A	132	27.795	35.128	15.790	1.00	42.69	AAAA
ATOM	1050	CB	LEU	A	132	27.491	36.299	16.721	1.00	41.21	AAAA
ATOM	1051	CG	LEU	A	132	26.152	36.971	16.419	1.00	40.03	AAAA
ATOM	1052	CD1	LEU	A	132	25.056	35.942	16.500	1.00	39.56	AAAA
ATOM	1053	CD2	LEU	A	132	25.891	38.087	17.399	1.00	40.70	AAAA
ATOM	1054	C	LEU	A	132	28.037	35.634	14.375	1.00	44.13	AAAA
ATOM	1055	O	LEU	A	132	29.037	36.290	14.104	1.00	45.92	AAAA
ATOM	1056	N	CYS	A	133	27.110	35.335	13.475	1.00	45.62	AAAA
ATOM	1057	CA	CYS	A	133	27.230	35.755	12.086	1.00	47.04	AAAA
ATOM	1058	C	CYS	A	133	26.291	36.891	11.697	1.00	47.56	AAAA
ATOM	1059	O	CYS	A	133	25.170	36.988	12.209	1.00	47.19	AAAA
ATOM	1060	CB	CYS	A	133	26.939	34.584	11.145	1.00	50.19	AAAA
ATOM	1061	SG	CYS	A	133	28.154	33.232	11.102	1.00	51.23	AAAA
ATOM	1062	N	ASN	A	134	26.767	37.736	10.782	1.00	46.25	AAAA
ATOM	1063	CA	ASN	A	134	25.991	38.846	10.225	1.00	45.36	AAAA
ATOM	1064	CB	ASN	A	134	24.686	38.298	9.643	1.00	44.47	AAAA
ATOM	1065	CG	ASN	A	134	24.919	37.200	8.635	1.00	46.53	AAAA
ATOM	1066	OD1	ASN	A	134	24.440	36.077	8.801	1.00	47.70	AAAA
ATOM	1067	ND2	ASN	A	134	25.666	37.513	7.579	1.00	45.36	AAAA
ATOM	1068	C	ASN	A	134	25.660	40.085	11.054	1.00	45.36	AAAA
ATOM	1069	O	ASN	A	134	25.640	41.189	10.517	1.00	44.33	AAAA
ATOM	1070	N	VAL	A	135	25.401	39.929	12.347	1.00	46.12	AAAA
ATOM	1071	CA	VAL	A	135	25.027	41.086	13.150	1.00	46.02	AAAA
ATOM	1072	CB	VAL	A	135	24.995	40.764	14.650	1.00	45.53	AAAA
ATOM	1073	CG1	VAL	A	135	24.473	41.966	15.413	1.00	45.33	AAAA
ATOM	1074	CG2	VAL	A	135	24.094	39.570	14.904	1.00	45.27	AAAA
ATOM	1075	C	VAL	A	135	25.909	42.299	12.924	1.00	46.05	AAAA
ATOM	1076	O	VAL	A	135	25.436	43.430	12.985	1.00	44.84	AAAA
ATOM	1077	N	GLU	A	136	27.185	42.061	12.644	1.00	47.93	AAAA
ATOM	1078	CA	GLU	A	136	28.135	43.152	12.401	1.00	49.67	AAAA
ATOM	1079	CB	GLU	A	136	29.513	42.587	12.021	1.00	50.13	AAAA
ATOM	1080	CG	GLU	A	136	29.504	41.597	10.853	1.00	52.05	AAAA
ATOM	1081	CD	GLU	A	136	30.890	41.092	10.504	0.01	52.11	AAAA
ATOM	1082	OE1	GLU	A	136	31.538	40.474	11.375	0.01	52.47	AAAA
ATOM	1083	OE2	GLU	A	136	31.333	41.314	9.357	0.01	52.51	AAAA
ATOM	1084	C	GLU	A	136	27.657	44.109	11.306	1.00	49.47	AAAA
ATOM	1085	O	GLU	A	136	27.812	45.327	11.421	1.00	50.68	AAAA
ATOM	1086	N	SER	A	137	27.053	43.545	10.265	1.00	47.85	AAAA
ATOM	1087	CA	SER	A	137	26.564	44.313	9.130	1.00	46.41	AAAA
ATOM	1088	CB	SER	A	137	26.163	43.370	7.999	1.00	46.12	AAAA
ATOM	1089	OG	SER	A	137	24.879	42.803	8.234	1.00	46.02	AAAA
ATOM	1090	C	SER	A	137	25.373	45.201	9.444	1.00	46.58	AAAA
ATOM	1091	O	SER	A	137	24.923	45.955	8.584	1.00	47.58	AAAA
ATOM	1092	N	ILE	A	138	24.855	45.115	10.661	1.00	46.72	AAAA
ATOM	1093	CA	ILE	A	138	23.687	45.903	11.030	1.00	46.68	AAAA
ATOM	1094	CB	ILE	A	138	23.027	45.335	12.310	1.00	45.26	AAAA
ATOM	1095	CG2	ILE	A	138	21.988	46.310	12.871	1.00	41.83	AAAA
ATOM	1096	CG1	ILE	A	138	22.392	43.982	11.979	1.00	44.12	AAAA
ATOM	1097	CD1	ILE	A	138	21.459	44.018	10.780	1.00	41.26	AAAA
ATOM	1098	C	ILE	A	138	23.956	47.383	11.211	1.00	48.72	AAAA
ATOM	1099	O	ILE	A	138	24.991	47.773	11.754	1.00	50.14	AAAA
ATOM	1100	N	GLN	A	139	23.013	48.199	10.736	1.00	50.31	AAAA
ATOM	1101	CA	GLN	A	139	23.095	49.656	10.834	1.00	51.22	AAAA
ATOM	1102	CB	GLN	A	139	22.585	50.306	9.537	1.00	51.00	AAAA
ATOM	1103	CG	GLN	A	139	23.383	49.886	8.314	1.00	52.42	AAAA
ATOM	1104	CD	GLN	A	139	22.890	50.505	7.016	1.00	53.35	AAAA
ATOM	1105	OE1	GLN	A	139	21.725	50.370	6.646	1.00	54.43	AAAA
ATOM	1106	NE2	GLN	A	139	23.790	51.174	6.307	1.00	54.58	AAAA
ATOM	1107	C	GLN	A	139	22.230	50.078	12.011	1.00	51.03	AAAA
ATOM	1108	O	GLN	A	139	21.040	50.351	11.856	1.00	50.84	AAAA
ATOM	1109	N	TRP	A	140	22.838	50.125	13.192	1.00	51.64	AAAA
ATOM	1110	CA	TRP	A	140	22.122	50.482	14.410	1.00	52.82	AAAA
ATOM	1111	CB	TRP	A	140	23.010	50.232	15.628	1.00	47.54	AAAA
ATOM	1112	CG	TRP	A	140	23.393	48.796	15.771	1.00	44.18	AAAA
ATOM	1113	CD2	TRP	A	140	22.605	47.758	16.356	1.00	39.87	AAAA
ATOM	1114	CE2	TRP	A	140	23.329	46.561	16.227	1.00	37.34	AAAA
ATOM	1115	CE3	TRP	A	140	21.353	47.726	16.977	1.00	40.55	AAAA
ATOM	1116	CD1	TRP	A	140	24.537	48.199	15.320	1.00	43.32	AAAA
ATOM	1117	NE1	TRP	A	140	24.504	46.857	15.590	1.00	40.80	AAAA
ATOM	1118	CZ2	TRP	A	140	22.847	45.345	16.695	1.00	38.78	AAAA
ATOM	1119	CZ3	TRP	A	140	20.872	46.517	17.443	1.00	39.65	AAAA
ATOM	1120	CH2	TRP	A	140	21.619	45.341	17.300	1.00	40.50	AAAA

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ATOM	1121	C	TRP	A	140	21.579	51.906	14.453	1.00	56.53	AAAA
ATOM	1122	O	TRP	A	140	20.699	52.215	15.267	1.00	57.49	AAAA
ATOM	1123	N	ARG	A	141	22.086	52.774	13.582	1.00	59.25	AAAA
ATOM	1124	CA	ARG	A	141	21.615	54.147	13.567	1.00	61.26	AAAA
ATOM	1125	CB	ARG	A	141	22.457	55.008	12.624	1.00	65.01	AAAA
ATOM	1126	CG	ARG	A	141	22.094	56.483	12.710	1.00	70.28	AAAA
ATOM	1127	CD	ARG	A	141	22.944	57.350	11.805	1.00	76.23	AAAA
ATOM	1128	NE	ARG	A	141	22.727	57.065	10.390	1.00	80.59	AAAA
ATOM	1129	CZ	ARG	A	141	23.299	57.744	9.401	1.00	82.40	AAAA
ATOM	1130	NH1	ARG	A	141	24.122	58.752	9.676	1.00	83.69	AAAA
ATOM	1131	NH2	ARG	A	141	23.053	57.416	8.140	1.00	82.50	AAAA
ATOM	1132	C	ARG	A	141	20.155	54.202	13.145	1.00	60.75	AAAA
ATOM	1133	O	ARG	A	141	19.543	55.266	13.148	1.00	61.56	AAAA
ATOM	1134	N	ASP	A	142	19.594	53.055	12.785	1.00	59.74	AAAA
ATOM	1135	CA	ASP	A	142	18.201	53.006	12.377	1.00	59.86	AAAA
ATOM	1136	CB	ASP	A	142	18.033	52.194	11.091	1.00	59.54	AAAA
ATOM	1137	CG	ASP	A	142	16.645	52.346	10.484	1.00	60.27	AAAA
ATOM	1138	OD1	ASP	A	142	16.408	53.363	9.798	1.00	62.20	AAAA
ATOM	1139	OD2	ASP	A	142	15.784	51.469	10.704	1.00	58.93	AAAA
ATOM	1140	C	ASP	A	142	17.364	52.363	13.467	1.00	60.91	AAAA
ATOM	1141	O	ASP	A	142	16.134	52.326	13.376	1.00	61.79	AAAA
ATOM	1142	N	ILE	A	143	18.024	51.854	14.502	1.00	60.93	AAAA
ATOM	1143	CA	ILE	A	143	17.301	51.194	15.575	1.00	61.69	AAAA
ATOM	1144	CB	ILE	A	143	17.784	49.736	15.762	1.00	59.26	AAAA
ATOM	1145	CG2	ILE	A	143	17.008	49.078	16.891	1.00	57.33	AAAA
ATOM	1146	CG1	ILE	A	143	17.606	48.953	14.459	1.00	57.45	AAAA
ATOM	1147	CD1	ILE	A	143	18.105	47.528	14.508	1.00	55.71	AAAA
ATOM	1148	C	ILE	A	143	17.386	51.896	16.920	1.00	64.50	AAAA
ATOM	1149	O	ILE	A	143	16.401	51.933	17.656	1.00	64.67	AAAA
ATOM	1150	N	VAL	A	144	18.550	52.456	17.242	1.00	67.48	AAAA
ATOM	1151	CA	VAL	A	144	18.737	53.109	18.537	1.00	70.67	AAAA
ATOM	1152	CB	VAL	A	144	20.045	52.627	19.210	1.00	69.51	AAAA
ATOM	1153	CG1	VAL	A	144	20.107	51.109	19.180	1.00	69.55	AAAA
ATOM	1154	CG2	VAL	A	144	21.251	53.224	18.517	1.00	69.38	AAAA
ATOM	1155	C	VAL	A	144	18.737	54.631	18.520	1.00	73.60	AAAA
ATOM	1156	O	VAL	A	144	19.344	55.256	17.654	1.00	74.34	AAAA
ATOM	1157	N	SER	A	145	18.057	55.222	19.498	1.00	77.74	AAAA
ATOM	1158	CA	SER	A	145	17.974	56.673	19.604	1.00	81.10	AAAA
ATOM	1159	CB	SER	A	145	17.336	57.074	20.932	1.00	81.01	AAAA
ATOM	1160	OG	SER	A	145	16.015	56.579	21.028	1.00	80.94	AAAA
ATOM	1161	C	SER	A	145	19.356	57.296	19.494	1.00	83.67	AAAA
ATOM	1162	O	SER	A	145	20.312	56.830	20.116	1.00	83.51	AAAA
ATOM	1163	N	SER	A	146	19.449	58.349	18.692	1.00	87.26	AAAA
ATOM	1164	CA	SER	A	146	20.703	59.060	18.470	1.00	90.66	AAAA
ATOM	1165	CB	SER	A	146	20.424	60.342	17.690	1.00	90.18	AAAA
ATOM	1166	OG	SER	A	146	19.315	61.026	18.245	1.00	90.84	AAAA
ATOM	1167	C	SER	A	146	21.422	59.389	19.773	1.00	92.81	AAAA
ATOM	1168	O	SER	A	146	22.650	59.342	19.851	1.00	92.50	AAAA
ATOM	1169	N	ASP	A	147	20.649	59.718	20.798	1.00	95.89	AAAA
ATOM	1170	CA	ASP	A	147	21.213	60.053	22.093	1.00	99.48	AAAA
ATOM	1171	CB	ASP	A	147	20.188	60.841	22.916	1.00	100.90	AAAA
ATOM	1172	CG	ASP	A	147	18.823	60.175	22.946	1.00	102.34	AAAA
ATOM	1173	OD1	ASP	A	147	18.382	59.680	21.886	1.00	102.99	AAAA
ATOM	1174	OD2	ASP	A	147	18.186	60.159	24.024	1.00	103.34	AAAA
ATOM	1175	C	ASP	A	147	21.670	58.812	22.854	1.00	101.33	AAAA
ATOM	1176	O	ASP	A	147	21.691	58.807	24.084	1.00	101.32	AAAA
ATOM	1177	N	PHE	A	148	22.038	57.765	22.117	1.00	103.72	AAAA
ATOM	1178	CA	PHE	A	148	22.507	56.518	22.721	1.00	106.02	AAAA
ATOM	1179	CB	PHE	A	148	21.338	55.553	22.944	1.00	106.28	AAAA
ATOM	1180	CG	PHE	A	148	20.347	56.029	23.963	1.00	106.66	AAAA
ATOM	1181	CD1	PHE	A	148	19.025	56.266	23.606	1.00	106.88	AAAA
ATOM	1182	CD2	PHE	A	148	20.738	56.261	25.278	1.00	106.77	AAAA
ATOM	1183	CE1	PHE	A	148	18.102	56.728	24.543	1.00	107.37	AAAA
ATOM	1184	CE2	PHE	A	148	19.826	56.723	26.225	1.00	107.07	AAAA
ATOM	1185	CZ	PHE	A	148	18.505	56.958	25.856	1.00	107.40	AAAA
ATOM	1186	C	PHE	A	148	23.554	55.844	21.847	1.00	107.55	AAAA
ATOM	1187	O	PHE	A	148	24.315	54.997	22.311	1.00	108.01	AAAA
ATOM	1188	N	LEU	A	149	23.587	56.229	20.579	1.00	109.52	AAAA
ATOM	1189	CA	LEU	A	149	24.534	55.668	19.628	1.00	111.99	AAAA
ATOM	1190	CB	LEU	A	149	24.297	56.302	18.253	1.00	112.31	AAAA
ATOM	1191	CG	LEU	A	149	25.246	55.995	17.091	1.00	113.22	AAAA
ATOM	1192	CD1	LEU	A	149	24.528	56.260	15.779	1.00	113.80	AAAA
ATOM	1193	CD2	LEU	A	149	26.510	56.841	17.195	1.00	113.28	AAAA
ATOM	1194	C	LEU	A	149	25.992	55.857	20.063	1.00	113.77	AAAA
ATOM	1195	O	LEU	A	149	26.865	55.080	19.676	1.00	113.99	AAAA

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ATOM	1196	N	SER	A	150	26.249	56.881	20.874	1.00115.82	AAAA
ATOM	1197	CA	SER	A	150	27.606	57.173	21.341	1.00117.44	AAAA
ATOM	1198	CB	SER	A	150	27.717	58.643	21.769	1.00117.48	AAAA
ATOM	1199	OG	SER	A	150	26.936	58.911	22.923	1.00117.36	AAAA
ATOM	1200	C	SER	A	150	28.064	56.279	22.494	1.00118.68	AAAA
ATOM	1201	O	SER	A	150	29.267	56.101	22.705	1.00118.93	AAAA
ATOM	1202	N	ASN	A	151	27.108	55.726	23.239	1.00119.51	AAAA
ATOM	1203	CA	ASN	A	151	27.424	54.856	24.370	1.00120.07	AAAA
ATOM	1204	CB	ASN	A	151	26.310	54.934	25.426	1.00119.71	AAAA
ATOM	1205	CG	ASN	A	151	26.852	55.034	26.851	1.00119.86	AAAA
ATOM	1206	OD1	ASN	A	151	27.604	55.953	27.181	1.00119.67	AAAA
ATOM	1207	ND2	ASN	A	151	26.462	54.092	27.701	1.00119.14	AAAA
ATOM	1208	C	ASN	A	151	27.593	53.414	23.890	1.00120.63	AAAA
ATOM	1209	O	ASN	A	151	27.905	52.518	24.677	1.00120.43	AAAA
ATOM	1210	N	MET	A	152	27.391	53.201	22.591	1.00121.39	AAAA
ATOM	1211	CA	MET	A	152	27.517	51.873	21.996	1.00122.20	AAAA
ATOM	1212	CB	MET	A	152	26.910	51.851	20.588	1.00122.85	AAAA
ATOM	1213	CG	MET	A	152	25.449	52.263	20.520	1.00123.66	AAAA
ATOM	1214	SD	MET	A	152	24.650	51.695	19.002	1.00125.48	AAAA
ATOM	1215	CE	MET	A	152	25.315	52.833	17.796	1.00124.10	AAAA
ATOM	1216	C	MET	A	152	28.970	51.422	21.918	1.00122.20	AAAA
ATOM	1217	O	MET	A	152	29.755	51.957	21.132	1.00122.44	AAAA
ATOM	1218	N	SER	A	153	29.321	50.430	22.731	1.00122.03	AAAA
ATOM	1219	CA	SER	A	153	30.679	49.900	22.752	1.00121.82	AAAA
ATOM	1220	CB	SER	A	153	31.272	50.029	24.159	1.00121.49	AAAA
ATOM	1221	OG	SER	A	153	32.641	49.667	24.172	1.00120.81	AAAA
ATOM	1222	C	SER	A	153	30.677	48.435	22.315	1.00121.70	AAAA
ATOM	1223	O	SER	A	153	30.925	47.533	23.118	1.00121.72	AAAA
ATOM	1224	N	MET	A	154	30.393	48.208	21.035	1.00121.26	AAAA
ATOM	1225	CA	MET	A	154	30.347	46.861	20.475	1.00120.36	AAAA
ATOM	1226	CB	MET	A	154	29.268	46.783	19.392	1.00120.21	AAAA
ATOM	1227	CG	MET	A	154	29.443	47.791	18.272	1.00120.11	AAAA
ATOM	1228	SD	MET	A	154	28.087	47.742	17.096	1.00119.86	AAAA
ATOM	1229	CE	MET	A	154	26.802	48.534	18.057	1.00119.71	AAAA
ATOM	1230	C	MET	A	154	31.687	46.405	19.896	1.00119.66	AAAA
ATOM	1231	O	MET	A	154	32.643	47.176	19.817	1.00119.62	AAAA
ATOM	1232	N	ASP	A	155	31.736	45.140	19.493	1.00118.80	AAAA
ATOM	1233	CA	ASP	A	155	32.936	44.533	18.924	1.00117.98	AAAA
ATOM	1234	CB	ASP	A	155	34.055	44.478	19.966	1.00118.41	AAAA
ATOM	1235	CG	ASP	A	155	35.206	43.586	19.536	1.00118.92	AAAA
ATOM	1236	OD1	ASP	A	155	35.859	43.898	18.516	1.00118.88	AAAA
ATOM	1237	OD2	ASP	A	155	35.453	42.567	20.217	1.00119.12	AAAA
ATOM	1238	C	ASP	A	155	32.578	43.120	18.487	1.00117.10	AAAA
ATOM	1239	O	ASP	A	155	32.248	42.275	19.320	1.00117.10	AAAA
ATOM	1240	N	PHE	A	156	32.658	42.861	17.185	1.00115.82	AAAA
ATOM	1241	CA	PHE	A	156	32.304	41.550	16.647	1.00114.62	AAAA
ATOM	1242	CB	PHE	A	156	31.252	41.722	15.540	1.00112.06	AAAA
ATOM	1243	CG	PHE	A	156	30.138	42.676	15.902	1.00109.06	AAAA
ATOM	1244	CD1	PHE	A	156	30.406	44.020	16.154	1.00107.57	AAAA
ATOM	1245	CD2	PHE	A	156	28.827	42.232	16.000	1.00108.22	AAAA
ATOM	1246	CE1	PHE	A	156	29.393	44.902	16.497	1.00105.86	AAAA
ATOM	1247	CE2	PHE	A	156	27.802	43.115	16.343	1.00107.30	AAAA
ATOM	1248	CZ	PHE	A	156	28.089	44.451	16.592	1.00106.11	AAAA
ATOM	1249	C	PHE	A	156	33.521	40.789	16.113	1.00114.57	AAAA
ATOM	1250	O	PHE	A	156	34.649	41.284	16.176	1.00114.53	AAAA
ATOM	1251	N	GLN	A	157	33.286	39.584	15.598	1.00114.50	AAAA
ATOM	1252	CA	GLN	A	157	34.360	38.752	15.054	1.00114.32	AAAA
ATOM	1253	CB	GLN	A	157	35.277	38.267	16.186	1.00114.06	AAAA
ATOM	1254	CG	GLN	A	157	36.475	37.449	15.724	1.00113.55	AAAA
ATOM	1255	CD	GLN	A	157	37.373	37.031	16.872	0.01113.61	AAAA
ATOM	1256	OE1	GLN	A	157	36.940	36.337	17.793	0.01113.53	AAAA
ATOM	1257	NE2	GLN	A	157	38.631	37.453	16.824	0.01113.52	AAAA
ATOM	1258	C	GLN	A	157	33.802	37.549	14.290	1.00113.93	AAAA
ATOM	1259	O	GLN	A	157	32.633	37.190	14.443	1.00114.03	AAAA
ATOM	1260	N	ASN	A	158	34.645	36.934	13.464	1.00113.30	AAAA
ATOM	1261	CA	ASN	A	158	34.246	35.769	12.678	1.00112.12	AAAA
ATOM	1262	CB	ASN	A	158	34.146	36.139	11.193	1.00111.80	AAAA
ATOM	1263	CG	ASN	A	158	33.761	34.958	10.322	0.01111.90	AAAA
ATOM	1264	OD1	ASN	A	158	32.722	34.333	10.528	0.01111.84	AAAA
ATOM	1265	ND2	ASN	A	158	34.601	34.648	9.341	0.01111.83	AAAA
ATOM	1266	C	ASN	A	158	35.242	34.624	12.864	1.00111.02	AAAA
ATOM	1267	O	ASN	A	158	35.841	34.148	11.900	1.00111.10	AAAA
ATOM	1268	N	HIS	A	159	35.422	34.197	14.111	1.00109.56	AAAA
ATOM	1269	CA	HIS	A	159	36.333	33.099	14.428	1.00107.53	AAAA
ATOM	1270	CB	HIS	A	159	36.915	33.284	15.836	1.00108.10	AAAA

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ATOM	1271	CG	HIS	A	159	38.096	32.409	16.126	0.01108.11	AAAA
ATOM	1272	CD2	HIS	A	159	39.381	32.717	16.422	0.01108.20	AAAA
ATOM	1273	ND1	HIS	A	159	38.022	31.032	16.130	0.01108.20	AAAA
ATOM	1274	CE1	HIS	A	159	39.210	30.530	16.417	0.01108.22	AAAA
ATOM	1275	NE2	HIS	A	159	40.052	31.531	16.599	0.01108.21	AAAA
ATOM	1276	C	HIS	A	159	35.565	31.775	14.333	1.00105.81	AAAA
ATOM	1277	O	HIS	A	159	35.805	30.835	15.092	1.00105.09	AAAA
ATOM	1278	N	LEU	A	160	34.619	31.730	13.398	1.00103.90	AAAA
ATOM	1279	CA	LEU	A	160	33.808	30.542	13.144	1.00101.51	AAAA
ATOM	1280	CB	LEU	A	160	32.361	30.764	13.596	1.00102.15	AAAA
ATOM	1281	CG	LEU	A	160	31.508	29.524	13.895	0.01102.19	AAAA
ATOM	1282	CD1	LEU	A	160	31.427	28.629	12.671	0.01102.31	AAAA
ATOM	1283	CD2	LEU	A	160	32.114	28.767	15.066	0.01102.31	AAAA
ATOM	1284	C	LEU	A	160	33.863	30.366	11.631	1.00 99.52	AAAA
ATOM	1285	O	LEU	A	160	33.932	29.248	11.120	1.00100.23	AAAA
ATOM	1286	N	GLY	A	161	33.831	31.496	10.929	1.00 96.78	AAAA
ATOM	1287	CA	GLY	A	161	33.916	31.497	9.481	1.00 92.94	AAAA
ATOM	1288	C	GLY	A	161	32.728	30.963	8.714	1.00 90.16	AAAA
ATOM	1289	O	GLY	A	161	32.490	31.385	7.582	1.00 90.44	AAAA
ATOM	1290	N	SER	A	162	31.984	30.036	9.311	1.00 86.80	AAAA
ATOM	1291	CA	SER	A	162	30.825	29.456	8.641	1.00 82.48	AAAA
ATOM	1292	CB	SER	A	162	30.267	28.270	9.436	1.00 83.67	AAAA
ATOM	1293	OG	SER	A	162	29.471	28.714	10.521	1.00 85.29	AAAA
ATOM	1294	C	SER	A	162	29.742	30.509	8.481	1.00 78.16	AAAA
ATOM	1295	O	SER	A	162	28.551	30.215	8.602	1.00 78.94	AAAA
ATOM	1296	N	CYS	A	163	30.164	31.742	8.221	1.00 72.13	AAAA
ATOM	1297	CA	CYS	A	163	29.232	32.838	8.031	1.00 65.92	AAAA
ATOM	1298	C	CYS	A	163	29.029	33.086	6.554	1.00 64.28	AAAA
ATOM	1299	O	CYS	A	163	29.993	33.196	5.802	1.00 63.90	AAAA
ATOM	1300	CB	CYS	A	163	29.759	34.120	8.662	1.00 62.73	AAAA
ATOM	1301	SG	CYS	A	163	29.846	34.152	10.477	1.00 56.37	AAAA
ATOM	1302	N	GLN	A	164	27.769	33.169	6.144	1.00 62.24	AAAA
ATOM	1303	CA	GLN	A	164	27.437	33.436	4.757	1.00 60.30	AAAA
ATOM	1304	CB	GLN	A	164	26.084	32.822	4.417	1.00 62.36	AAAA
ATOM	1305	CG	GLN	A	164	25.917	31.363	4.822	1.00 66.38	AAAA
ATOM	1306	CD	GLN	A	164	24.519	30.823	4.504	1.00 69.57	AAAA
ATOM	1307	OE1	GLN	A	164	24.069	29.838	5.099	1.00 70.98	AAAA
ATOM	1308	NE2	GLN	A	164	23.831	31.464	3.558	1.00 69.42	AAAA
ATOM	1309	C	GLN	A	164	27.347	34.951	4.618	1.00 58.46	AAAA
ATOM	1310	O	GLN	A	164	27.099	35.648	5.598	1.00 57.00	AAAA
ATOM	1311	N	LYS	A	165	27.569	35.476	3.420	1.00 57.08	AAAA
ATOM	1312	CA	LYS	A	165	27.445	36.917	3.245	1.00 56.35	AAAA
ATOM	1313	CB	LYS	A	165	28.153	37.394	1.976	1.00 57.91	AAAA
ATOM	1314	CG	LYS	A	165	29.656	37.546	2.115	1.00 61.88	AAAA
ATOM	1315	CD	LYS	A	165	30.220	38.491	1.058	1.00 64.32	AAAA
ATOM	1316	CE	LYS	A	165	30.092	37.916	-0.339	1.00 66.55	AAAA
ATOM	1317	NZ	LYS	A	165	30.888	36.664	-0.471	1.00 68.26	AAAA
ATOM	1318	C	LYS	A	165	25.957	37.242	3.153	1.00 54.94	AAAA
ATOM	1319	O	LYS	A	165	25.143	36.384	2.790	1.00 54.32	AAAA
ATOM	1320	N	CYS	A	166	25.591	38.470	3.498	1.00 52.36	AAAA
ATOM	1321	CA	CYS	A	166	24.195	38.849	3.432	1.00 50.42	AAAA
ATOM	1322	C	CYS	A	166	23.712	38.645	1.994	1.00 50.04	AAAA
ATOM	1323	O	CYS	A	166	24.504	38.727	1.054	1.00 48.76	AAAA
ATOM	1324	CB	CYS	A	166	24.017	40.310	3.845	1.00 50.37	AAAA
ATOM	1325	SG	CYS	A	166	24.182	40.677	5.630	1.00 52.73	AAAA
ATOM	1326	N	ASP	A	167	22.420	38.366	1.830	1.00 48.48	AAAA
ATOM	1327	CA	ASP	A	167	21.837	38.172	0.509	1.00 47.19	AAAA
ATOM	1328	CB	ASP	A	167	20.336	37.926	0.643	1.00 47.24	AAAA
ATOM	1329	CG	ASP	A	167	19.723	37.368	-0.624	1.00 48.93	AAAA
ATOM	1330	OD1	ASP	A	167	19.654	38.112	-1.630	1.00 49.46	AAAA
ATOM	1331	OD2	ASP	A	167	19.316	36.183	-0.616	1.00 46.29	AAAA
ATOM	1332	C	ASP	A	167	22.112	39.433	-0.319	1.00 46.69	AAAA
ATOM	1333	O	ASP	A	167	22.082	40.542	0.211	1.00 48.29	AAAA
ATOM	1334	N	PRO	A	168	22.385	39.284	-1.629	1.00 46.34	AAAA
ATOM	1335	CD	PRO	A	168	22.488	38.036	-2.406	1.00 46.35	AAAA
ATOM	1336	CA	PRO	A	168	22.669	40.447	-2.481	1.00 44.93	AAAA
ATOM	1337	CB	PRO	A	168	23.006	39.819	-3.834	1.00 45.07	AAAA
ATOM	1338	CG	PRO	A	168	23.456	38.428	-3.490	1.00 44.46	AAAA
ATOM	1339	C	PRO	A	168	21.515	41.423	-2.596	1.00 45.29	AAAA
ATOM	1340	O	PRO	A	168	21.701	42.549	-3.021	1.00 45.23	AAAA
ATOM	1341	N	SER	A	169	20.321	40.986	-2.222	1.00 46.74	AAAA
ATOM	1342	CA	SER	A	169	19.144	41.832	-2.315	1.00 50.75	AAAA
ATOM	1343	CB	SER	A	169	17.900	40.970	-2.570	1.00 52.05	AAAA
ATOM	1344	OG	SER	A	169	18.016	40.237	-3.787	1.00 51.10	AAAA
ATOM	1345	C	SER	A	169	18.942	42.681	-1.069	1.00 53.98	AAAA

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ATOM	1346	O	SER A 169	17.978	43.441	-0.964	1.00	55.46	AAAA
ATOM	1347	N	CYS A 170	19.856	42.559	-0.120	1.00	57.23	AAAA
ATOM	1348	CA	CYS A 170	19.757	43.322	1.113	1.00	60.49	AAAA
ATOM	1349	C	CYS A 170	20.267	44.762	0.910	1.00	63.76	AAAA
ATOM	1350	O	CYS A 170	20.953	45.048	-0.073	1.00	63.93	AAAA
ATOM	1351	CB	CYS A 170	20.558	42.627	2.218	1.00	58.77	AAAA
ATOM	1352	SG	CYS A 170	19.931	41.035	2.868	1.00	54.39	AAAA
ATOM	1353	N	PRO A 171	19.920	45.684	1.833	1.00	66.44	AAAA
ATOM	1354	CD	PRO A 171	18.807	45.497	2.779	1.00	67.90	AAAA
ATOM	1355	CA	PRO A 171	20.315	47.103	1.800	1.00	67.86	AAAA
ATOM	1356	CB	PRO A 171	19.275	47.780	2.700	1.00	67.76	AAAA
ATOM	1357	CG	PRO A 171	18.110	46.826	2.681	1.00	69.05	AAAA
ATOM	1358	C	PRO A 171	21.738	47.369	2.297	1.00	68.77	AAAA
ATOM	1359	O	PRO A 171	22.082	47.040	3.430	1.00	69.34	AAAA
ATOM	1360	N	ASN A 172	22.554	47.989	1.454	1.00	69.66	AAAA
ATOM	1361	CA	ASN A 172	23.935	48.288	1.811	1.00	69.99	AAAA
ATOM	1362	CB	ASN A 172	23.999	49.532	2.701	1.00	71.70	AAAA
ATOM	1363	CG	ASN A 172	25.421	50.052	2.884	1.00	71.86	AAAA
ATOM	1364	OD1	ASN A 172	25.651	51.021	3.607	0.01	72.16	AAAA
ATOM	1365	ND2	ASN A 172	26.378	49.408	2.225	0.01	72.15	AAAA
ATOM	1366	C	ASN A 172	24.550	47.085	2.532	1.00	69.50	AAAA
ATOM	1367	O	ASN A 172	25.383	47.229	3.435	1.00	69.96	AAAA
ATOM	1368	N	GLY A 173	24.121	45.894	2.122	1.00	67.54	AAAA
ATOM	1369	CA	GLY A 173	24.633	44.672	2.708	1.00	64.33	AAAA
ATOM	1370	C	GLY A 173	24.344	44.534	4.187	1.00	62.23	AAAA
ATOM	1371	O	GLY A 173	25.254	44.243	4.969	1.00	63.58	AAAA
ATOM	1372	N	SER A 174	23.086	44.734	4.574	1.00	57.73	AAAA
ATOM	1373	CA	SER A 174	22.698	44.626	5.973	1.00	53.75	AAAA
ATOM	1374	CB	SER A 174	22.084	45.935	6.468	1.00	53.52	AAAA
ATOM	1375	OG	SER A 174	23.075	46.915	6.699	1.00	53.71	AAAA
ATOM	1376	C	SER A 174	21.705	43.508	6.193	1.00	51.76	AAAA
ATOM	1377	O	SER A 174	20.701	43.416	5.505	1.00	51.21	AAAA
ATOM	1378	N	CYS A 175	21.980	42.659	7.170	1.00	51.84	AAAA
ATOM	1379	CA	CYS A 175	21.070	41.563	7.460	1.00	50.50	AAAA
ATOM	1380	C	CYS A 175	21.302	40.994	8.849	1.00	48.47	AAAA
ATOM	1381	O	CYS A 175	22.325	41.273	9.474	1.00	49.37	AAAA
ATOM	1382	CB	CYS A 175	21.232	40.466	6.412	1.00	50.40	AAAA
ATOM	1383	SG	CYS A 175	22.777	39.510	6.500	1.00	47.29	AAAA
ATOM	1384	N	TRP A 176	20.341	40.212	9.330	1.00	46.37	AAAA
ATOM	1385	CA	TRP A 176	20.435	39.577	10.644	1.00	44.37	AAAA
ATOM	1386	CB	TRP A 176	19.112	39.689	11.394	1.00	41.90	AAAA
ATOM	1387	CG	TRP A 176	18.812	41.052	11.859	1.00	41.21	AAAA
ATOM	1388	CD2	TRP A 176	19.248	41.645	13.082	1.00	43.34	AAAA
ATOM	1389	CE2	TRP A 176	18.750	42.963	13.106	1.00	41.70	AAAA
ATOM	1390	CE3	TRP A 176	20.016	41.188	14.166	1.00	43.05	AAAA
ATOM	1391	CD1	TRP A 176	18.090	41.999	11.209	1.00	40.48	AAAA
ATOM	1392	NE1	TRP A 176	18.046	43.152	11.949	1.00	41.05	AAAA
ATOM	1393	CZ2	TRP A 176	18.992	43.833	14.167	1.00	42.83	AAAA
ATOM	1394	CZ3	TRP A 176	20.259	42.056	15.223	1.00	42.53	AAAA
ATOM	1395	CH2	TRP A 176	19.747	43.364	15.214	1.00	43.04	AAAA
ATOM	1396	C	TRP A 176	20.806	38.103	10.512	1.00	44.38	AAAA
ATOM	1397	O	TRP A 176	21.029	37.420	11.504	1.00	44.30	AAAA
ATOM	1398	N	GLY A 177	20.868	37.624	9.275	1.00	45.37	AAAA
ATOM	1399	CA	GLY A 177	21.210	36.240	9.018	1.00	46.76	AAAA
ATOM	1400	C	GLY A 177	21.067	35.938	7.540	1.00	48.06	AAAA
ATOM	1401	O	GLY A 177	20.696	36.819	6.760	1.00	49.44	AAAA
ATOM	1402	N	ALA A 178	21.361	34.702	7.148	1.00	47.29	AAAA
ATOM	1403	CA	ALA A 178	21.249	34.301	5.751	1.00	46.38	AAAA
ATOM	1404	CB	ALA A 178	21.667	32.851	5.601	1.00	46.86	AAAA
ATOM	1405	C	ALA A 178	19.809	34.480	5.278	1.00	46.62	AAAA
ATOM	1406	O	ALA A 178	18.899	34.591	6.099	1.00	46.25	AAAA
ATOM	1407	N	GLY A 179	19.607	34.512	3.960	1.00	46.15	AAAA
ATOM	1408	CA	GLY A 179	18.270	34.660	3.413	1.00	45.25	AAAA
ATOM	1409	C	GLY A 179	17.779	36.092	3.283	1.00	47.20	AAAA
ATOM	1410	O	GLY A 179	18.185	36.976	4.039	1.00	45.95	AAAA
ATOM	1411	N	GLU A 180	16.904	36.322	2.307	1.00	48.69	AAAA
ATOM	1412	CA	GLU A 180	16.344	37.648	2.076	1.00	50.07	AAAA
ATOM	1413	CB	GLU A 180	15.638	37.697	0.721	1.00	48.49	AAAA
ATOM	1414	CG	GLU A 180	16.614	37.588	-0.438	1.00	51.83	AAAA
ATOM	1415	CD	GLU A 180	15.961	37.657	-1.808	1.00	51.14	AAAA
ATOM	1416	OE1	GLU A 180	16.663	37.369	-2.800	1.00	47.27	AAAA
ATOM	1417	OE2	GLU A 180	14.763	37.997	-1.891	1.00	50.87	AAAA
ATOM	1418	C	GLU A 180	15.367	37.965	3.195	1.00	51.01	AAAA
ATOM	1419	O	GLU A 180	15.015	39.122	3.425	1.00	51.19	AAAA
ATOM	1420	N	GLU A 181	14.949	36.916	3.894	1.00	50.69	AAAA

ATOM	1421	CA	GLU	A	181	14.020	37.039	5.000	1.00	51.35	AAAA
ATOM	1422	CB	GLU	A	181	13.704	35.654	5.586	1.00	55.30	AAAA
ATOM	1423	CG	GLU	A	181	13.165	34.601	4.615	1.00	62.52	AAAA
ATOM	1424	CD	GLU	A	181	14.094	34.307	3.424	1.00	67.51	AAAA
ATOM	1425	OE1	GLU	A	181	14.205	35.171	2.528	1.00	69.21	AAAA
ATOM	1426	OE2	GLU	A	181	14.708	33.213	3.377	1.00	69.01	AAAA
ATOM	1427	C	GLU	A	181	14.669	37.893	6.083	1.00	49.66	AAAA
ATOM	1428	O	GLU	A	181	14.023	38.732	6.695	1.00	48.57	AAAA
ATOM	1429	N	ASN	A	182	15.962	37.684	6.305	1.00	49.29	AAAA
ATOM	1430	CA	ASN	A	182	16.671	38.406	7.353	1.00	48.94	AAAA
ATOM	1431	CB	ASN	A	182	17.683	37.482	8.030	1.00	46.80	AAAA
ATOM	1432	CG	ASN	A	182	17.024	36.287	8.686	1.00	46.43	AAAA
ATOM	1433	OD1	ASN	A	182	16.083	36.436	9.461	1.00	45.40	AAAA
ATOM	1434	ND2	ASN	A	182	17.514	35.095	8.378	1.00	45.47	AAAA
ATOM	1435	C	ASN	A	182	17.357	39.701	6.976	1.00	49.37	AAAA
ATOM	1436	O	ASN	A	182	18.221	40.169	7.715	1.00	50.26	AAAA
ATOM	1437	N	CYS	A	183	16.990	40.287	5.841	1.00	49.36	AAAA
ATOM	1438	CA	CYS	A	183	17.608	41.551	5.453	1.00	48.77	AAAA
ATOM	1439	C	CYS	A	183	17.121	42.623	6.437	1.00	47.97	AAAA
ATOM	1440	O	CYS	A	183	16.020	42.528	6.975	1.00	45.20	AAAA
ATOM	1441	CB	CYS	A	183	17.208	41.952	4.028	1.00	49.97	AAAA
ATOM	1442	SG	CYS	A	183	17.909	41.034	2.609	1.00	51.03	AAAA
ATOM	1443	N	GLN	A	184	17.940	43.637	6.677	1.00	47.98	AAAA
ATOM	1444	CA	GLN	A	184	17.550	44.699	7.596	1.00	49.96	AAAA
ATOM	1445	CB	GLN	A	184	18.784	45.470	8.099	1.00	46.32	AAAA
ATOM	1446	CG	GLN	A	184	18.424	46.696	8.929	1.00	43.95	AAAA
ATOM	1447	CD	GLN	A	184	19.615	47.327	9.641	1.00	44.04	AAAA
ATOM	1448	OE1	GLN	A	184	20.742	47.311	9.137	1.00	40.59	AAAA
ATOM	1449	NE2	GLN	A	184	19.359	47.914	10.811	1.00	40.47	AAAA
ATOM	1450	C	GLN	A	184	16.550	45.680	6.969	1.00	51.88	AAAA
ATOM	1451	O	GLN	A	184	16.774	46.217	5.882	1.00	52.14	AAAA
ATOM	1452	N	LYS	A	185	15.439	45.900	7.663	1.00	53.30	AAAA
ATOM	1453	CA	LYS	A	185	14.423	46.827	7.194	1.00	53.70	AAAA
ATOM	1454	CB	LYS	A	185	13.039	46.399	7.683	1.00	51.76	AAAA
ATOM	1455	CG	LYS	A	185	12.649	44.972	7.339	1.00	52.44	AAAA
ATOM	1456	CD	LYS	A	185	11.220	44.681	7.802	1.00	52.65	AAAA
ATOM	1457	CE	LYS	A	185	10.776	43.249	7.505	1.00	52.35	AAAA
ATOM	1458	NZ	LYS	A	185	11.446	42.242	8.372	1.00	51.40	AAAA
ATOM	1459	C	LYS	A	185	14.764	48.195	7.776	1.00	55.49	AAAA
ATOM	1460	O	LYS	A	185	14.887	48.347	8.992	1.00	56.22	AAAA
ATOM	1461	N	LEU	A	186	14.938	49.189	6.916	1.00	56.27	AAAA
ATOM	1462	CA	LEU	A	186	15.242	50.521	7.402	1.00	57.96	AAAA
ATOM	1463	CB	LEU	A	186	16.259	51.190	6.487	1.00	59.42	AAAA
ATOM	1464	CG	LEU	A	186	17.571	50.391	6.473	1.00	61.16	AAAA
ATOM	1465	CD1	LEU	A	186	18.679	51.190	5.794	1.00	61.15	AAAA
ATOM	1466	CD2	LEU	A	186	17.973	50.058	7.903	1.00	60.70	AAAA
ATOM	1467	C	LEU	A	186	13.962	51.331	7.491	1.00	58.85	AAAA
ATOM	1468	O	LEU	A	186	13.117	51.266	6.598	1.00	59.85	AAAA
ATOM	1469	N	THR	A	187	13.800	52.070	8.584	1.00	58.94	AAAA
ATOM	1470	CA	THR	A	187	12.595	52.866	8.766	1.00	59.34	AAAA
ATOM	1471	CB	THR	A	187	11.528	52.067	9.550	1.00	58.57	AAAA
ATOM	1472	OG1	THR	A	187	12.079	51.620	10.797	1.00	56.88	AAAA
ATOM	1473	CG2	THR	A	187	11.067	50.864	8.743	1.00	56.12	AAAA
ATOM	1474	C	THR	A	187	12.805	54.218	9.452	1.00	60.71	AAAA
ATOM	1475	O	THR	A	187	11.841	54.881	9.817	1.00	60.89	AAAA
ATOM	1476	N	LYS	A	188	14.055	54.634	9.629	1.00	62.77	AAAA
ATOM	1477	CA	LYS	A	188	14.326	55.918	10.266	1.00	65.00	AAAA
ATOM	1478	CB	LYS	A	188	14.610	55.742	11.759	1.00	64.92	AAAA
ATOM	1479	CG	LYS	A	188	14.955	57.058	12.463	1.00	64.48	AAAA
ATOM	1480	CD	LYS	A	188	15.032	56.919	13.975	1.00	65.28	AAAA
ATOM	1481	CE	LYS	A	188	16.260	56.134	14.415	1.00	65.77	AAAA
ATOM	1482	NZ	LYS	A	188	17.526	56.842	14.092	1.00	64.08	AAAA
ATOM	1483	C	LYS	A	188	15.498	56.648	9.636	1.00	67.11	AAAA
ATOM	1484	O	LYS	A	188	15.692	57.843	9.869	1.00	68.04	AAAA
ATOM	1485	N	ILE	A	189	16.272	55.932	8.830	1.00	68.43	AAAA
ATOM	1486	CA	ILE	A	189	17.447	56.511	8.192	1.00	69.36	AAAA
ATOM	1487	CB	ILE	A	189	18.649	55.535	8.320	1.00	69.14	AAAA
ATOM	1488	CG2	ILE	A	189	18.419	54.303	7.451	1.00	68.39	AAAA
ATOM	1489	CG1	ILE	A	189	19.948	56.231	7.923	1.00	69.30	AAAA
ATOM	1490	CD1	ILE	A	189	21.149	55.306	7.956	1.00	70.21	AAAA
ATOM	1491	C	ILE	A	189	17.206	56.858	6.718	1.00	70.16	AAAA
ATOM	1492	O	ILE	A	189	17.929	57.670	6.142	1.00	68.96	AAAA
ATOM	1493	N	ILE	A	190	16.184	56.248	6.121	1.00	71.88	AAAA
ATOM	1494	CA	ILE	A	190	15.853	56.483	4.716	1.00	74.74	AAAA
ATOM	1495	CB	ILE	A	190	15.758	55.160	3.926	1.00	74.19	AAAA

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ATOM	1496	CG2	ILE	A	190	17.074	54.413	3.993	1.00	74.42	AAAA
ATOM	1497	CG1	ILE	A	190	14.615	54.309	4.484	1.00	74.26	AAAA
ATOM	1498	CD1	ILE	A	190	14.326	53.057	3.687	1.00	74.87	AAAA
ATOM	1499	C	ILE	A	190	14.512	57.196	4.554	1.00	76.92	AAAA
ATOM	1500	O	ILE	A	190	13.878	57.107	3.501	1.00	77.60	AAAA
ATOM	1501	N	CYS	A	191	14.078	57.897	5.592	1.00	79.38	AAAA
ATOM	1502	CA	CYS	A	191	12.801	58.595	5.537	1.00	82.10	AAAA
ATOM	1503	C	CYS	A	191	12.862	59.989	4.895	1.00	84.06	AAAA
ATOM	1504	O	CYS	A	191	13.898	60.666	4.923	1.00	83.56	AAAA
ATOM	1505	CB	CYS	A	191	12.204	58.695	6.948	1.00	82.02	AAAA
ATOM	1506	SG	CYS	A	191	11.804	57.090	7.718	1.00	80.87	AAAA
ATOM	1507	N	ALA	A	192	11.737	60.401	4.311	1.00	85.73	AAAA
ATOM	1508	CA	ALA	A	192	11.633	61.706	3.670	1.00	87.60	AAAA
ATOM	1509	CB	ALA	A	192	10.274	61.852	2.983	1.00	86.72	AAAA
ATOM	1510	C	ALA	A	192	11.817	62.797	4.720	1.00	89.31	AAAA
ATOM	1511	O	ALA	A	192	11.306	62.700	5.840	1.00	89.62	AAAA
ATOM	1512	N	GLN	A	193	12.553	63.835	4.346	1.00	91.29	AAAA
ATOM	1513	CA	GLN	A	193	12.842	64.953	5.236	1.00	92.94	AAAA
ATOM	1514	CB	GLN	A	193	13.539	66.063	4.441	1.00	93.67	AAAA
ATOM	1515	CG	GLN	A	193	14.759	65.571	3.665	1.00	94.57	AAAA
ATOM	1516	CD	GLN	A	193	15.770	64.859	4.557	1.00	95.71	AAAA
ATOM	1517	OE1	GLN	A	193	16.390	65.476	5.424	1.00	96.74	AAAA
ATOM	1518	NE2	GLN	A	193	15.933	63.554	4.350	1.00	94.81	AAAA
ATOM	1519	C	GLN	A	193	11.609	65.507	5.954	1.00	93.26	AAAA
ATOM	1520	O	GLN	A	193	11.644	65.765	7.159	1.00	92.94	AAAA
ATOM	1521	N	GLN	A	194	10.519	65.677	5.216	1.00	93.86	AAAA
ATOM	1522	CA	GLN	A	194	9.291	66.212	5.790	1.00	94.06	AAAA
ATOM	1523	CB	GLN	A	194	8.269	66.523	4.687	1.00	95.44	AAAA
ATOM	1524	CG	GLN	A	194	8.846	67.076	3.387	1.00	97.99	AAAA
ATOM	1525	CD	GLN	A	194	9.348	65.985	2.445	1.00	99.67	AAAA
ATOM	1526	OE1	GLN	A	194	8.589	65.101	2.033	1.00	99.64	AAAA
ATOM	1527	NE2	GLN	A	194	10.630	66.048	2.096	1.00	100.14	AAAA
ATOM	1528	C	GLN	A	194	8.649	65.248	6.783	1.00	93.10	AAAA
ATOM	1529	O	GLN	A	194	7.459	65.363	7.068	1.00	93.80	AAAA
ATOM	1530	N	CYS	A	195	9.415	64.302	7.321	1.00	92.12	AAAA
ATOM	1531	CA	CYS	A	195	8.825	63.348	8.257	1.00	90.66	AAAA
ATOM	1532	C	CYS	A	195	9.418	63.302	9.650	1.00	89.87	AAAA
ATOM	1533	O	CYS	A	195	10.615	63.517	9.846	1.00	89.54	AAAA
ATOM	1534	CB	CYS	A	195	8.823	61.955	7.636	1.00	89.98	AAAA
ATOM	1535	SG	CYS	A	195	7.809	61.955	6.128	1.00	87.72	AAAA
ATOM	1536	N	SER	A	196	8.543	63.011	10.609	1.00	89.35	AAAA
ATOM	1537	CA	SER	A	196	8.891	62.947	12.023	1.00	89.06	AAAA
ATOM	1538	CB	SER	A	196	7.709	63.452	12.863	1.00	89.67	AAAA
ATOM	1539	OG	SER	A	196	6.531	62.695	12.618	1.00	89.57	AAAA
ATOM	1540	C	SER	A	196	9.305	61.562	12.515	1.00	88.36	AAAA
ATOM	1541	O	SER	A	196	10.437	61.364	12.956	1.00	88.30	AAAA
ATOM	1542	N	GLY	A	197	8.384	60.607	12.444	1.00	87.34	AAAA
ATOM	1543	CA	GLY	A	197	8.689	59.269	12.913	1.00	86.20	AAAA
ATOM	1544	C	GLY	A	197	9.252	58.320	11.877	1.00	85.49	AAAA
ATOM	1545	O	GLY	A	197	10.024	58.705	11.000	1.00	84.08	AAAA
ATOM	1546	N	ARG	A	198	8.867	57.056	11.996	1.00	85.91	AAAA
ATOM	1547	CA	ARG	A	198	9.329	56.037	11.073	1.00	86.14	AAAA
ATOM	1548	CB	ARG	A	198	9.044	54.629	11.615	1.00	86.72	AAAA
ATOM	1549	CG	ARG	A	198	9.138	54.459	13.138	1.00	88.24	AAAA
ATOM	1550	CD	ARG	A	198	10.533	54.697	13.727	1.00	87.94	AAAA
ATOM	1551	NE	ARG	A	198	11.553	53.810	13.179	1.00	88.14	AAAA
ATOM	1552	CZ	ARG	A	198	12.744	53.608	13.735	1.00	88.34	AAAA
ATOM	1553	NH1	ARG	A	198	13.066	54.222	14.865	1.00	88.13	AAAA
ATOM	1554	NH2	ARG	A	198	13.626	52.813	13.147	1.00	88.54	AAAA
ATOM	1555	C	ARG	A	198	8.567	56.237	9.774	1.00	85.37	AAAA
ATOM	1556	O	ARG	A	198	7.661	57.067	9.695	1.00	85.03	AAAA
ATOM	1557	N	CYS	A	199	8.928	55.461	8.764	1.00	84.93	AAAA
ATOM	1558	CA	CYS	A	199	8.281	55.557	7.471	1.00	84.63	AAAA
ATOM	1559	C	CYS	A	199	8.296	54.204	6.777	1.00	85.40	AAAA
ATOM	1560	O	CYS	A	199	9.128	53.349	7.083	1.00	85.40	AAAA
ATOM	1561	CB	CYS	A	199	9.012	56.578	6.611	1.00	83.02	AAAA
ATOM	1562	SG	CYS	A	199	10.738	56.114	6.295	1.00	81.33	AAAA
ATOM	1563	N	ARG	A	200	7.363	54.019	5.848	1.00	86.17	AAAA
ATOM	1564	CA	ARG	A	200	7.251	52.785	5.083	1.00	86.89	AAAA
ATOM	1565	CB	ARG	A	200	5.875	52.710	4.416	1.00	88.04	AAAA
ATOM	1566	CG	ARG	A	200	4.721	52.531	5.390	1.00	90.47	AAAA
ATOM	1567	CD	ARG	A	200	3.354	52.550	4.696	1.00	92.88	AAAA
ATOM	1568	NE	ARG	A	200	3.339	51.753	3.471	1.00	95.81	AAAA
ATOM	1569	CZ	ARG	A	200	3.566	52.250	2.257	1.00	97.36	AAAA
ATOM	1570	NH1	ARG	A	200	3.818	53.544	2.113	1.00	98.09	AAAA

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ATOM	1571	NH2	ARG	A	200	3.557	51.459	1.189	1.00	97.22	AAAA
ATOM	1572	C	ARG	A	200	8.351	52.749	4.024	1.00	86.99	AAAA
ATOM	1573	O	ARG	A	200	9.012	51.733	3.834	1.00	86.56	AAAA
ATOM	1574	N	GLY	A	201	8.534	53.875	3.344	1.00	87.59	AAAA
ATOM	1575	CA	GLY	A	201	9.553	53.991	2.319	1.00	89.04	AAAA
ATOM	1576	C	GLY	A	201	10.143	55.385	2.387	1.00	90.54	AAAA
ATOM	1577	O	GLY	A	201	10.097	56.017	3.441	1.00	91.78	AAAA
ATOM	1578	N	SER	A	202	10.698	55.878	1.283	1.00	91.26	AAAA
ATOM	1579	CA	SER	A	202	11.271	57.222	1.280	1.00	91.46	AAAA
ATOM	1580	CB	SER	A	202	12.621	57.236	0.561	1.00	91.76	AAAA
ATOM	1581	OG	SER	A	202	13.203	58.528	0.622	1.00	90.90	AAAA
ATOM	1582	C	SER	A	202	10.313	58.186	0.595	1.00	91.52	AAAA
ATOM	1583	O	SER	A	202	10.626	59.358	0.391	1.00	90.79	AAAA
ATOM	1584	N	SER	A	203	9.139	57.672	0.245	1.00	92.09	AAAA
ATOM	1585	CA	SER	A	203	8.111	58.466	-0.410	1.00	92.72	AAAA
ATOM	1586	CB	SER	A	203	7.112	57.541	-1.106	1.00	92.32	AAAA
ATOM	1587	OG	SER	A	203	5.919	58.231	-1.433	1.00	92.10	AAAA
ATOM	1588	C	SER	A	203	7.382	59.353	0.597	1.00	93.08	AAAA
ATOM	1589	O	SER	A	203	6.991	58.895	1.671	1.00	93.46	AAAA
ATOM	1590	N	PRO	A	204	7.197	60.641	0.263	1.00	93.09	AAAA
ATOM	1591	CD	PRO	A	204	7.750	61.347	-0.908	1.00	92.98	AAAA
ATOM	1592	CA	PRO	A	204	6.507	61.580	1.154	1.00	92.47	AAAA
ATOM	1593	CB	PRO	A	204	6.468	62.863	0.330	1.00	92.49	AAAA
ATOM	1594	CG	PRO	A	204	7.749	62.790	-0.444	1.00	92.54	AAAA
ATOM	1595	C	PRO	A	204	5.113	61.098	1.558	1.00	91.59	AAAA
ATOM	1596	O	PRO	A	204	4.544	61.575	2.539	1.00	91.49	AAAA
ATOM	1597	N	SER	A	205	4.570	60.153	0.799	1.00	90.63	AAAA
ATOM	1598	CA	SER	A	205	3.247	59.607	1.087	1.00	90.31	AAAA
ATOM	1599	CB	SER	A	205	2.504	59.305	-0.215	1.00	90.24	AAAA
ATOM	1600	OG	SER	A	205	2.408	60.458	-1.028	1.00	91.83	AAAA
ATOM	1601	C	SER	A	205	3.359	58.320	1.896	1.00	89.65	AAAA
ATOM	1602	O	SER	A	205	2.350	57.699	2.236	1.00	89.68	AAAA
ATOM	1603	N	ASP	A	206	4.590	57.933	2.211	1.00	88.61	AAAA
ATOM	1604	CA	ASP	A	206	4.847	56.699	2.945	1.00	87.27	AAAA
ATOM	1605	CB	ASP	A	206	5.917	55.892	2.199	1.00	87.91	AAAA
ATOM	1606	CG	ASP	A	206	5.472	55.490	0.804	1.00	89.25	AAAA
ATOM	1607	OD1	ASP	A	206	4.949	56.360	0.074	1.00	89.73	AAAA
ATOM	1608	OD2	ASP	A	206	5.645	54.308	0.432	1.00	89.76	AAAA
ATOM	1609	C	ASP	A	206	5.259	56.863	4.408	1.00	85.32	AAAA
ATOM	1610	O	ASP	A	206	5.761	55.921	5.013	1.00	85.03	AAAA
ATOM	1611	N	CYS	A	207	5.041	58.040	4.986	1.00	83.28	AAAA
ATOM	1612	CA	CYS	A	207	5.418	58.258	6.378	1.00	80.61	AAAA
ATOM	1613	C	CYS	A	207	4.397	57.817	7.406	1.00	77.76	AAAA
ATOM	1614	O	CYS	A	207	3.191	57.806	7.154	1.00	77.94	AAAA
ATOM	1615	CB	CYS	A	207	5.797	59.715	6.600	1.00	81.69	AAAA
ATOM	1616	SG	CYS	A	207	7.379	60.013	5.782	1.00	85.26	AAAA
ATOM	1617	N	CYS	A	208	4.905	57.452	8.577	1.00	73.98	AAAA
ATOM	1618	CA	CYS	A	208	4.076	56.965	9.664	1.00	70.13	AAAA
ATOM	1619	C	CYS	A	208	3.626	58.054	10.621	1.00	68.96	AAAA
ATOM	1620	O	CYS	A	208	4.289	59.082	10.772	1.00	67.69	AAAA
ATOM	1621	CB	CYS	A	208	4.843	55.907	10.447	1.00	67.88	AAAA
ATOM	1622	SG	CYS	A	208	5.550	54.573	9.440	1.00	63.42	AAAA
ATOM	1623	N	HIS	A	209	2.494	57.812	11.273	1.00	67.78	AAAA
ATOM	1624	CA	HIS	A	209	1.963	58.759	12.235	1.00	68.16	AAAA
ATOM	1625	CB	HIS	A	209	0.621	58.273	12.766	1.00	69.93	AAAA
ATOM	1626	CG	HIS	A	209	-0.036	59.244	13.688	1.00	72.49	AAAA
ATOM	1627	CD2	HIS	A	209	0.031	60.594	13.751	1.00	73.30	AAAA
ATOM	1628	ND1	HIS	A	209	-0.863	58.850	14.718	1.00	73.57	AAAA
ATOM	1629	CE1	HIS	A	209	-1.273	59.917	15.379	1.00	74.42	AAAA
ATOM	1630	NE2	HIS	A	209	-0.745	60.988	14.813	1.00	74.80	AAAA
ATOM	1631	C	HIS	A	209	2.977	58.871	13.373	1.00	67.91	AAAA
ATOM	1632	O	HIS	A	209	3.673	57.904	13.681	1.00	67.86	AAAA
ATOM	1633	N	ASN	A	210	3.057	60.042	14.000	1.00	67.56	AAAA
ATOM	1634	CA	ASN	A	210	4.033	60.269	15.065	1.00	66.77	AAAA
ATOM	1635	CB	ASN	A	210	3.866	61.674	15.659	1.00	68.84	AAAA
ATOM	1636	CG	ASN	A	210	2.619	61.801	16.519	1.00	71.33	AAAA
ATOM	1637	OD1	ASN	A	210	2.601	62.542	17.505	1.00	71.67	AAAA
ATOM	1638	ND2	ASN	A	210	1.565	61.082	16.146	1.00	71.40	AAAA
ATOM	1639	C	ASN	A	210	4.015	59.242	16.199	1.00	65.16	AAAA
ATOM	1640	O	ASN	A	210	5.060	58.951	16.792	1.00	64.68	AAAA
ATOM	1641	N	GLN	A	211	2.837	58.698	16.500	1.00	62.20	AAAA
ATOM	1642	CA	GLN	A	211	2.699	57.720	17.574	1.00	59.93	AAAA
ATOM	1643	CB	GLN	A	211	1.260	57.705	18.094	1.00	58.62	AAAA
ATOM	1644	CG	GLN	A	211	0.858	58.979	18.801	1.00	56.96	AAAA
ATOM	1645	CD	GLN	A	211	1.778	59.324	19.946	1.00	56.29	AAAA

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ATOM	1646	OE1	GLN	A	211	1.788	58.651	20.972	1.00	56.69	AAAA
ATOM	1647	NE2	GLN	A	211	2.564	60.378	19.776	1.00	56.65	AAAA
ATOM	1648	C	GLN	A	211	3.104	56.307	17.172	1.00	59.67	AAAA
ATOM	1649	O	GLN	A	211	2.858	55.348	17.901	1.00	59.74	AAAA
ATOM	1650	N	CYS	A	212	3.721	56.174	16.008	1.00	59.14	AAAA
ATOM	1651	CA	CYS	A	212	4.148	54.869	15.549	1.00	57.65	AAAA
ATOM	1652	C	CYS	A	212	5.583	54.613	15.939	1.00	57.76	AAAA
ATOM	1653	O	CYS	A	212	6.418	55.526	15.941	1.00	55.84	AAAA
ATOM	1654	CB	CYS	A	212	4.035	54.764	14.040	1.00	57.76	AAAA
ATOM	1655	SG	CYS	A	212	2.361	54.571	13.375	1.00	56.57	AAAA
ATOM	1656	N	ALA	A	213	5.864	53.357	16.262	1.00	58.73	AAAA
ATOM	1657	CA	ALA	A	213	7.206	52.948	16.643	1.00	59.33	AAAA
ATOM	1658	CB	ALA	A	213	7.220	52.506	18.098	1.00	59.23	AAAA
ATOM	1659	C	ALA	A	213	7.643	51.806	15.732	1.00	59.51	AAAA
ATOM	1660	O	ALA	A	213	6.829	50.959	15.361	1.00	58.53	AAAA
ATOM	1661	N	ALA	A	214	8.921	51.806	15.361	1.00	60.41	AAAA
ATOM	1662	CA	ALA	A	214	9.493	50.773	14.499	1.00	62.54	AAAA
ATOM	1663	CB	ALA	A	214	9.047	49.381	14.968	1.00	63.79	AAAA
ATOM	1664	C	ALA	A	214	9.133	50.958	13.030	1.00	63.20	AAAA
ATOM	1665	O	ALA	A	214	10.010	51.141	12.177	1.00	63.43	AAAA
ATOM	1666	N	GLY	A	215	7.842	50.890	12.733	1.00	62.95	AAAA
ATOM	1667	CA	GLY	A	215	7.404	51.052	11.364	1.00	63.29	AAAA
ATOM	1668	C	GLY	A	215	5.900	51.084	11.302	1.00	63.67	AAAA
ATOM	1669	O	GLY	A	215	5.242	51.151	12.336	1.00	63.66	AAAA
ATOM	1670	N	CYS	A	216	5.351	51.020	10.095	1.00	65.17	AAAA
ATOM	1671	CA	CYS	A	216	3.906	51.056	9.937	1.00	66.54	AAAA
ATOM	1672	C	CYS	A	216	3.441	50.534	8.596	1.00	68.69	AAAA
ATOM	1673	O	CYS	A	216	4.210	50.485	7.642	1.00	69.58	AAAA
ATOM	1674	CB	CYS	A	216	3.414	52.485	10.089	1.00	65.18	AAAA
ATOM	1675	SG	CYS	A	216	3.911	53.603	8.740	1.00	63.25	AAAA
ATOM	1676	N	THR	A	217	2.172	50.151	8.535	1.00	71.56	AAAA
ATOM	1677	CA	THR	A	217	1.567	49.659	7.306	1.00	75.38	AAAA
ATOM	1678	CB	THR	A	217	0.890	48.291	7.518	1.00	76.72	AAAA
ATOM	1679	OG1	THR	A	217	-0.150	48.417	8.495	1.00	79.07	AAAA
ATOM	1680	CG2	THR	A	217	1.901	47.263	7.996	1.00	78.15	AAAA
ATOM	1681	C	THR	A	217	0.505	50.678	6.902	1.00	77.29	AAAA
ATOM	1682	O	THR	A	217	-0.687	50.368	6.856	1.00	78.07	AAAA
ATOM	1683	N	GLY	A	218	0.944	51.900	6.622	1.00	78.92	AAAA
ATOM	1684	CA	GLY	A	218	0.014	52.948	6.247	1.00	80.90	AAAA
ATOM	1685	C	GLY	A	218	0.439	54.291	6.808	1.00	82.34	AAAA
ATOM	1686	O	GLY	A	218	1.401	54.364	7.567	1.00	82.58	AAAA
ATOM	1687	N	PRO	A	219	-0.267	55.377	6.464	1.00	83.59	AAAA
ATOM	1688	CD	PRO	A	219	-1.333	55.448	5.447	1.00	83.73	AAAA
ATOM	1689	CA	PRO	A	219	0.068	56.719	6.948	1.00	84.18	AAAA
ATOM	1690	CB	PRO	A	219	-0.354	57.592	5.787	1.00	83.61	AAAA
ATOM	1691	CG	PRO	A	219	-1.665	56.938	5.417	1.00	83.83	AAAA
ATOM	1692	C	PRO	A	219	-0.662	57.116	8.226	1.00	84.40	AAAA
ATOM	1693	O	PRO	A	219	-0.393	58.174	8.794	1.00	83.48	AAAA
ATOM	1694	N	ARG	A	220	-1.583	56.274	8.677	1.00	85.02	AAAA
ATOM	1695	CA	ARG	A	220	-2.359	56.601	9.861	1.00	85.98	AAAA
ATOM	1696	CB	ARG	A	220	-3.827	56.248	9.626	1.00	87.35	AAAA
ATOM	1697	CG	ARG	A	220	-4.558	57.247	8.749	1.00	90.79	AAAA
ATOM	1698	CD	ARG	A	220	-5.988	56.808	8.474	1.00	93.70	AAAA
ATOM	1699	NE	ARG	A	220	-6.802	57.910	7.967	1.00	96.20	AAAA
ATOM	1700	CZ	ARG	A	220	-8.047	57.781	7.515	1.00	97.11	AAAA
ATOM	1701	NH1	ARG	A	220	-8.634	56.590	7.498	1.00	97.80	AAAA
ATOM	1702	NH2	ARG	A	220	-8.709	58.849	7.086	1.00	97.00	AAAA
ATOM	1703	C	ARG	A	220	-1.919	56.050	11.212	1.00	85.73	AAAA
ATOM	1704	O	ARG	A	220	-0.893	55.377	11.349	1.00	85.37	AAAA
ATOM	1705	N	GLU	A	221	-2.742	56.370	12.204	1.00	84.52	AAAA
ATOM	1706	CA	GLU	A	221	-2.553	55.999	13.594	1.00	83.32	AAAA
ATOM	1707	CB	GLU	A	221	-3.519	56.823	14.438	1.00	84.93	AAAA
ATOM	1708	CG	GLU	A	221	-3.687	58.243	13.909	1.00	87.60	AAAA
ATOM	1709	CD	GLU	A	221	-4.892	58.967	14.484	1.00	88.94	AAAA
ATOM	1710	OE1	GLU	A	221	-5.159	60.110	14.043	1.00	89.17	AAAA
ATOM	1711	OE2	GLU	A	221	-5.570	58.400	15.370	1.00	89.48	AAAA
ATOM	1712	C	GLU	A	221	-2.795	54.513	13.822	1.00	81.68	AAAA
ATOM	1713	O	GLU	A	221	-1.974	53.822	14.423	1.00	82.65	AAAA
ATOM	1714	N	SER	A	222	-3.932	54.025	13.348	1.00	79.11	AAAA
ATOM	1715	CA	SER	A	222	-4.271	52.618	13.503	1.00	76.75	AAAA
ATOM	1716	CB	SER	A	222	-5.742	52.386	13.132	1.00	77.31	AAAA
ATOM	1717	OG	SER	A	222	-5.986	52.629	11.751	1.00	77.14	AAAA
ATOM	1718	C	SER	A	222	-3.384	51.759	12.607	1.00	75.23	AAAA
ATOM	1719	O	SER	A	222	-3.598	50.550	12.478	1.00	75.53	AAAA
ATOM	1720	N	ASP	A	223	-2.379	52.381	11.997	1.00	72.37	AAAA

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ATOM	1721	CA	ASP	A	223	-1.502	51.661	11.085	1.00	69.73	AAAA
ATOM	1722	CB	ASP	A	223	-1.481	52.382	9.734	1.00	70.34	AAAA
ATOM	1723	CG	ASP	A	223	-2.851	52.434	9.090	1.00	69.06	AAAA
ATOM	1724	OD1	ASP	A	223	-3.400	51.359	8.776	1.00	69.66	AAAA
ATOM	1725	OD2	ASP	A	223	-3.383	53.545	8.910	1.00	68.91	AAAA
ATOM	1726	C	ASP	A	223	-0.083	51.439	11.584	1.00	67.62	AAAA
ATOM	1727	O	ASP	A	223	0.825	51.162	10.795	1.00	66.02	AAAA
ATOM	1728	N	CYS	A	224	0.104	51.544	12.896	1.00	65.07	AAAA
ATOM	1729	CA	CYS	A	224	1.419	51.344	13.485	1.00	61.90	AAAA
ATOM	1730	C	CYS	A	224	1.708	49.860	13.703	1.00	60.87	AAAA
ATOM	1731	O	CYS	A	224	0.787	49.046	13.788	1.00	59.18	AAAA
ATOM	1732	CB	CYS	A	224	1.510	52.036	14.839	1.00	60.46	AAAA
ATOM	1733	SG	CYS	A	224	1.249	53.831	14.890	1.00	59.85	AAAA
ATOM	1734	N	LEU	A	225	2.993	49.520	13.791	1.00	59.99	AAAA
ATOM	1735	CA	LEU	A	225	3.405	48.146	14.056	1.00	60.05	AAAA
ATOM	1736	CB	LEU	A	225	4.840	47.909	13.583	1.00	58.86	AAAA
ATOM	1737	CG	LEU	A	225	5.031	47.825	12.068	1.00	58.09	AAAA
ATOM	1738	CD1	LEU	A	225	6.499	47.544	11.749	1.00	54.61	AAAA
ATOM	1739	CD2	LEU	A	225	4.112	46.733	11.503	1.00	55.73	AAAA
ATOM	1740	C	LEU	A	225	3.316	47.981	15.569	1.00	60.79	AAAA
ATOM	1741	O	LEU	A	225	2.700	47.037	16.075	1.00	60.05	AAAA
ATOM	1742	N	VAL	A	226	3.945	48.917	16.279	1.00	61.36	AAAA
ATOM	1743	CA	VAL	A	226	3.922	48.953	17.739	1.00	61.26	AAAA
ATOM	1744	CB	VAL	A	226	5.242	48.446	18.371	1.00	60.46	AAAA
ATOM	1745	CG1	VAL	A	226	5.468	47.004	17.989	1.00	62.20	AAAA
ATOM	1746	CG2	VAL	A	226	6.410	49.306	17.931	1.00	60.22	AAAA
ATOM	1747	C	VAL	A	226	3.710	50.411	18.126	1.00	60.76	AAAA
ATOM	1748	O	VAL	A	226	4.170	51.317	17.422	1.00	60.76	AAAA
ATOM	1749	N	CYS	A	227	3.007	50.628	19.236	1.00	60.32	AAAA
ATOM	1750	CA	CYS	A	227	2.714	51.973	19.717	1.00	59.58	AAAA
ATOM	1751	C	CYS	A	227	3.871	52.638	20.434	1.00	61.42	AAAA
ATOM	1752	O	CYS	A	227	4.622	51.997	21.167	1.00	62.53	AAAA
ATOM	1753	CB	CYS	A	227	1.495	51.954	20.635	1.00	57.59	AAAA
ATOM	1754	SG	CYS	A	227	-0.075	51.771	19.736	1.00	54.82	AAAA
ATOM	1755	N	ARG	A	228	4.005	53.938	20.206	1.00	62.94	AAAA
ATOM	1756	CA	ARG	A	228	5.055	54.738	20.815	1.00	64.04	AAAA
ATOM	1757	CB	ARG	A	228	5.085	56.119	20.160	1.00	67.31	AAAA
ATOM	1758	CG	ARG	A	228	5.779	57.184	20.976	1.00	71.97	AAAA
ATOM	1759	CD	ARG	A	228	7.275	57.071	20.893	1.00	73.93	AAAA
ATOM	1760	NE	ARG	A	228	7.749	57.348	19.545	1.00	76.17	AAAA
ATOM	1761	CZ	ARG	A	228	9.023	57.570	19.243	1.00	78.34	AAAA
ATOM	1762	NH1	ARG	A	228	9.946	57.548	20.199	1.00	78.75	AAAA
ATOM	1763	NH2	ARG	A	228	9.374	57.812	17.987	1.00	79.53	AAAA
ATOM	1764	C	ARG	A	228	4.769	54.865	22.302	1.00	62.78	AAAA
ATOM	1765	O	ARG	A	228	5.592	54.509	23.133	1.00	62.43	AAAA
ATOM	1766	N	LYS	A	229	3.591	55.375	22.631	1.00	62.10	AAAA
ATOM	1767	CA	LYS	A	229	3.199	55.531	24.019	1.00	61.40	AAAA
ATOM	1768	CB	LYS	A	229	2.840	56.987	24.317	1.00	61.42	AAAA
ATOM	1769	CG	LYS	A	229	4.037	57.905	24.448	1.00	61.77	AAAA
ATOM	1770	CD	LYS	A	229	3.611	59.300	24.881	1.00	64.42	AAAA
ATOM	1771	CE	LYS	A	229	4.819	60.224	25.056	1.00	66.45	AAAA
ATOM	1772	NZ	LYS	A	229	4.433	61.616	25.426	1.00	63.91	AAAA
ATOM	1773	C	LYS	A	229	2.017	54.634	24.350	1.00	61.45	AAAA
ATOM	1774	O	LYS	A	229	2.168	53.425	24.515	1.00	62.61	AAAA
ATOM	1775	N	PHE	A	230	0.835	55.223	24.438	1.00	60.48	AAAA
ATOM	1776	CA	PHE	A	230	-0.350	54.456	24.770	1.00	60.22	AAAA
ATOM	1777	CB	PHE	A	230	-1.414	55.364	25.389	1.00	59.88	AAAA
ATOM	1778	CG	PHE	A	230	-1.049	55.881	26.742	1.00	58.46	AAAA
ATOM	1779	CD1	PHE	A	230	-0.020	56.803	26.893	1.00	58.93	AAAA
ATOM	1780	CD2	PHE	A	230	-1.716	55.432	27.868	1.00	57.18	AAAA
ATOM	1781	CE1	PHE	A	230	0.342	57.268	28.147	1.00	57.43	AAAA
ATOM	1782	CE2	PHE	A	230	-1.363	55.890	29.124	1.00	58.53	AAAA
ATOM	1783	CZ	PHE	A	230	-0.329	56.812	29.263	1.00	58.08	AAAA
ATOM	1784	C	PHE	A	230	-0.943	53.720	23.589	1.00	60.46	AAAA
ATOM	1785	O	PHE	A	230	-0.646	54.014	22.441	1.00	59.07	AAAA
ATOM	1786	N	ARG	A	231	-1.787	52.750	23.901	1.00	62.80	AAAA
ATOM	1787	CA	ARG	A	231	-2.458	51.943	22.905	1.00	65.85	AAAA
ATOM	1788	CB	ARG	A	231	-1.908	50.518	22.913	1.00	69.01	AAAA
ATOM	1789	CG	ARG	A	231	-2.718	49.542	22.084	1.00	73.82	AAAA
ATOM	1790	CD	ARG	A	231	-2.222	48.116	22.259	1.00	78.04	AAAA
ATOM	1791	NE	ARG	A	231	-3.131	47.150	21.646	1.00	81.93	AAAA
ATOM	1792	CZ	ARG	A	231	-4.396	46.969	22.021	1.00	83.86	AAAA
ATOM	1793	NH1	ARG	A	231	-4.915	47.689	23.012	1.00	83.60	AAAA
ATOM	1794	NH2	ARG	A	231	-5.145	46.063	21.402	1.00	84.73	AAAA
ATOM	1795	C	ARG	A	231	-3.926	51.933	23.281	1.00	67.00	AAAA

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ATOM	1796	O	ARG	A	231	-4.298	51.566	24.401	1.00	66.52	AAAA
ATOM	1797	N	ASP	A	232	-4.755	52.351	22.336	1.00	68.45	AAAA
ATOM	1798	CA	ASP	A	232	-6.193	52.424	22.533	1.00	69.70	AAAA
ATOM	1799	CB	ASP	A	232	-6.647	53.880	22.356	1.00	70.04	AAAA
ATOM	1800	CG	ASP	A	232	-8.090	54.105	22.759	1.00	70.68	AAAA
ATOM	1801	OD1	ASP	A	232	-8.525	55.277	22.749	1.00	70.15	AAAA
ATOM	1802	OD2	ASP	A	232	-8.786	53.119	23.084	1.00	71.94	AAAA
ATOM	1803	C	ASP	A	232	-6.822	51.520	21.479	1.00	70.28	AAAA
ATOM	1804	O	ASP	A	232	-6.750	51.812	20.285	1.00	71.25	AAAA
ATOM	1805	N	GLU	A	233	-7.422	50.421	21.923	1.00	70.37	AAAA
ATOM	1806	CA	GLU	A	233	-8.043	49.469	21.013	1.00	70.25	AAAA
ATOM	1807	CB	GLU	A	233	-9.355	50.030	20.470	1.00	70.92	AAAA
ATOM	1808	CG	GLU	A	233	-10.405	50.286	21.537	1.00	72.92	AAAA
ATOM	1809	CD	GLU	A	233	-10.814	49.030	22.285	0.01	73.07	AAAA
ATOM	1810	OE1	GLU	A	233	-11.655	49.133	23.202	0.01	73.49	AAAA
ATOM	1811	OE2	GLU	A	233	-10.299	47.940	21.958	0.01	73.49	AAAA
ATOM	1812	C	GLU	A	233	-7.090	49.162	19.864	1.00	69.84	AAAA
ATOM	1813	O	GLU	A	233	-6.247	48.279	19.976	1.00	70.56	AAAA
ATOM	1814	N	ALA	A	234	-7.216	49.900	18.766	1.00	69.15	AAAA
ATOM	1815	CA	ALA	A	234	-6.356	49.693	17.605	1.00	67.73	AAAA
ATOM	1816	CB	ALA	A	234	-7.182	49.174	16.435	1.00	67.46	AAAA
ATOM	1817	C	ALA	A	234	-5.619	50.966	17.193	1.00	67.24	AAAA
ATOM	1818	O	ALA	A	234	-5.170	51.082	16.056	1.00	67.51	AAAA
ATOM	1819	N	THR	A	235	-5.478	51.911	18.117	1.00	66.50	AAAA
ATOM	1820	CA	THR	A	235	-4.803	53.169	17.816	1.00	65.61	AAAA
ATOM	1821	CB	THR	A	235	-5.808	54.346	17.875	1.00	66.47	AAAA
ATOM	1822	OG1	THR	A	235	-6.784	54.198	16.836	1.00	66.93	AAAA
ATOM	1823	CG2	THR	A	235	-5.096	55.674	17.692	1.00	67.67	AAAA
ATOM	1824	C	THR	A	235	-3.646	53.462	18.773	1.00	64.34	AAAA
ATOM	1825	O	THR	A	235	-3.594	52.916	19.875	1.00	65.64	AAAA
ATOM	1826	N	CYS	A	236	-2.715	54.311	18.340	1.00	60.70	AAAA
ATOM	1827	CA	CYS	A	236	-1.583	54.703	19.176	1.00	58.30	AAAA
ATOM	1828	C	CYS	A	236	-1.749	56.170	19.531	1.00	57.11	AAAA
ATOM	1829	O	CYS	A	236	-1.667	57.036	18.661	1.00	56.82	AAAA
ATOM	1830	CB	CYS	A	236	-0.242	54.532	18.448	1.00	58.81	AAAA
ATOM	1831	SG	CYS	A	236	0.272	52.830	18.043	1.00	56.82	AAAA
ATOM	1832	N	LYS	A	237	-1.973	56.449	20.810	1.00	56.30	AAAA
ATOM	1833	CA	LYS	A	237	-2.160	57.819	21.267	1.00	54.56	AAAA
ATOM	1834	CB	LYS	A	237	-3.527	57.950	21.929	1.00	53.84	AAAA
ATOM	1835	CG	LYS	A	237	-4.661	57.653	20.985	1.00	54.20	AAAA
ATOM	1836	CD	LYS	A	237	-5.984	57.688	21.699	1.00	58.23	AAAA
ATOM	1837	CE	LYS	A	237	-7.143	57.452	20.730	1.00	59.61	AAAA
ATOM	1838	NZ	LYS	A	237	-7.073	56.121	20.067	1.00	59.70	AAAA
ATOM	1839	C	LYS	A	237	-1.072	58.277	22.224	1.00	53.56	AAAA
ATOM	1840	O	LYS	A	237	-0.510	57.484	22.964	1.00	53.96	AAAA
ATOM	1841	N	ASP	A	238	-0.771	59.566	22.198	1.00	53.34	AAAA
ATOM	1842	CA	ASP	A	238	0.243	60.120	23.077	1.00	53.04	AAAA
ATOM	1843	CB	ASP	A	238	0.608	61.532	22.647	1.00	53.71	AAAA
ATOM	1844	CG	ASP	A	238	1.700	62.117	23.499	1.00	57.42	AAAA
ATOM	1845	OD1	ASP	A	238	2.846	61.620	23.417	1.00	58.51	AAAA
ATOM	1846	OD2	ASP	A	238	1.413	63.063	24.263	1.00	59.40	AAAA
ATOM	1847	C	ASP	A	238	-0.265	60.152	24.510	1.00	52.51	AAAA
ATOM	1848	O	ASP	A	238	0.517	60.228	25.457	1.00	52.92	AAAA
ATOM	1849	N	THR	A	239	-1.585	60.113	24.658	1.00	51.86	AAAA
ATOM	1850	CA	THR	A	239	-2.233	60.119	25.967	1.00	53.06	AAAA
ATOM	1851	CB	THR	A	239	-2.328	61.545	26.580	1.00	54.14	AAAA
ATOM	1852	OG1	THR	A	239	-1.018	62.110	26.710	1.00	55.47	AAAA
ATOM	1853	CG2	THR	A	239	-2.967	61.487	27.963	1.00	55.03	AAAA
ATOM	1854	C	THR	A	239	-3.640	59.607	25.739	1.00	52.95	AAAA
ATOM	1855	O	THR	A	239	-4.205	59.824	24.673	1.00	53.57	AAAA
ATOM	1856	N	CYS	A	240	-4.208	58.921	26.724	1.00	53.56	AAAA
ATOM	1857	CA	CYS	A	240	-5.560	58.405	26.565	1.00	54.88	AAAA
ATOM	1858	C	CYS	A	240	-6.585	59.537	26.552	1.00	56.05	AAAA
ATOM	1859	O	CYS	A	240	-6.399	60.578	27.194	1.00	57.09	AAAA
ATOM	1860	CB	CYS	A	240	-5.912	57.434	27.695	1.00	54.61	AAAA
ATOM	1861	SG	CYS	A	240	-4.946	55.895	27.726	1.00	54.55	AAAA
ATOM	1862	N	PRO	A	241	-7.681	59.353	25.805	1.00	54.66	AAAA
ATOM	1863	CD	PRO	A	241	-7.979	58.227	24.911	1.00	54.86	AAAA
ATOM	1864	CA	PRO	A	241	-8.730	60.371	25.731	1.00	54.01	AAAA
ATOM	1865	CB	PRO	A	241	-9.735	59.760	24.753	1.00	53.92	AAAA
ATOM	1866	CG	PRO	A	241	-9.474	58.282	24.855	1.00	55.64	AAAA
ATOM	1867	C	PRO	A	241	-9.331	60.626	27.111	1.00	52.89	AAAA
ATOM	1868	O	PRO	A	241	-9.867	59.713	27.734	1.00	53.84	AAAA
ATOM	1869	N	PRO	A	242	-9.255	61.877	27.600	1.00	51.54	AAAA
ATOM	1870	CD	PRO	A	242	-8.726	63.060	26.906	1.00	49.64	AAAA

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ATOM	1871	CA	PRO A 242	-9.785	62.253	28.912	1.00	49.70	AAAA
ATOM	1872	CB	PRO A 242	-9.528	63.754	28.973	1.00	48.28	AAAA
ATOM	1873	CG	PRO A 242	-8.382	63.948	28.059	1.00	49.50	AAAA
ATOM	1874	C	PRO A 242	-11.258	61.940	29.050	1.00	51.05	AAAA
ATOM	1875	O	PRO A 242	-11.978	61.849	28.059	1.00	50.69	AAAA
ATOM	1876	N	LEU A 243	-11.701	61.782	30.292	1.00	52.78	AAAA
ATOM	1877	CA	LEU A 243	-13.101	61.502	30.579	1.00	53.84	AAAA
ATOM	1878	CB	LEU A 243	-13.241	60.867	31.963	1.00	55.15	AAAA
ATOM	1879	CG	LEU A 243	-12.465	59.583	32.237	1.00	57.26	AAAA
ATOM	1880	CD1	LEU A 243	-12.760	59.142	33.657	1.00	58.83	AAAA
ATOM	1881	CD2	LEU A 243	-12.863	58.497	31.245	1.00	57.07	AAAA
ATOM	1882	C	LEU A 243	-13.888	62.807	30.551	1.00	53.46	AAAA
ATOM	1883	O	LEU A 243	-15.116	62.806	30.497	1.00	54.25	AAAA
ATOM	1884	N	MET A 244	-13.166	63.918	30.609	1.00	52.58	AAAA
ATOM	1885	CA	MET A 244	-13.776	65.236	30.590	1.00	53.34	AAAA
ATOM	1886	CB	MET A 244	-13.895	65.795	32.018	1.00	54.69	AAAA
ATOM	1887	CG	MET A 244	-15.022	65.185	32.849	1.00	57.09	AAAA
ATOM	1888	SD	MET A 244	-15.267	65.986	34.452	1.00	61.40	AAAA
ATOM	1889	CE	MET A 244	-16.008	64.612	35.415	1.00	56.61	AAAA
ATOM	1890	C	MET A 244	-12.958	66.195	29.728	1.00	53.36	AAAA
ATOM	1891	O	MET A 244	-11.730	66.098	29.657	1.00	54.33	AAAA
ATOM	1892	N	LEU A 245	-13.646	67.110	29.056	1.00	52.53	AAAA
ATOM	1893	CA	LEU A 245	-12.981	68.100	28.226	1.00	51.49	AAAA
ATOM	1894	CB	LEU A 245	-13.320	67.893	26.754	1.00	51.39	AAAA
ATOM	1895	CG	LEU A 245	-12.686	66.667	26.094	1.00	53.64	AAAA
ATOM	1896	CD1	LEU A 245	-13.435	66.349	24.814	1.00	53.73	AAAA
ATOM	1897	CD2	LEU A 245	-11.197	66.912	25.830	1.00	50.89	AAAA
ATOM	1898	C	LEU A 245	-13.436	69.478	28.662	1.00	51.38	AAAA
ATOM	1899	O	LEU A 245	-14.595	69.679	29.021	1.00	51.07	AAAA
ATOM	1900	N	TYR A 246	-12.507	70.420	28.651	1.00	50.18	AAAA
ATOM	1901	CA	TYR A 246	-12.810	71.788	29.020	1.00	50.73	AAAA
ATOM	1902	CB	TYR A 246	-11.519	72.529	29.346	1.00	47.94	AAAA
ATOM	1903	CG	TYR A 246	-11.699	73.955	29.790	1.00	45.73	AAAA
ATOM	1904	CD1	TYR A 246	-12.265	74.251	31.032	1.00	44.42	AAAA
ATOM	1905	CE1	TYR A 246	-12.325	75.562	31.498	1.00	43.30	AAAA
ATOM	1906	CD2	TYR A 246	-11.212	75.009	29.013	1.00	45.57	AAAA
ATOM	1907	CE2	TYR A 246	-11.266	76.326	29.466	1.00	42.93	AAAA
ATOM	1908	CZ	TYR A 246	-11.816	76.592	30.711	1.00	43.68	AAAA
ATOM	1909	OH	TYR A 246	-11.804	77.877	31.193	1.00	44.04	AAAA
ATOM	1910	C	TYR A 246	-13.481	72.443	27.816	1.00	52.10	AAAA
ATOM	1911	O	TYR A 246	-13.133	72.147	26.666	1.00	53.56	AAAA
ATOM	1912	N	ASN A 247	-14.442	73.325	28.080	1.00	52.10	AAAA
ATOM	1913	CA	ASN A 247	-15.151	74.033	27.022	1.00	50.83	AAAA
ATOM	1914	CB	ASN A 247	-16.650	73.943	27.262	1.00	50.18	AAAA
ATOM	1915	CG	ASN A 247	-17.450	74.353	26.056	1.00	49.02	AAAA
ATOM	1916	OD1	ASN A 247	-17.138	75.347	25.408	1.00	47.60	AAAA
ATOM	1917	ND2	ASN A 247	-18.496	73.591	25.748	1.00	47.20	AAAA
ATOM	1918	C	ASN A 247	-14.714	75.499	27.038	1.00	50.54	AAAA
ATOM	1919	O	ASN A 247	-15.081	76.255	27.926	1.00	51.49	AAAA
ATOM	1920	N	PRO A 248	-13.925	75.920	26.050	1.00	50.16	AAAA
ATOM	1921	CD	PRO A 248	-13.412	75.126	24.924	1.00	50.04	AAAA
ATOM	1922	CA	PRO A 248	-13.444	77.303	25.974	1.00	50.89	AAAA
ATOM	1923	CB	PRO A 248	-12.619	77.310	24.691	1.00	50.70	AAAA
ATOM	1924	CG	PRO A 248	-12.162	75.884	24.565	1.00	51.21	AAAA
ATOM	1925	C	PRO A 248	-14.523	78.394	25.956	1.00	52.50	AAAA
ATOM	1926	O	PRO A 248	-14.224	79.566	26.210	1.00	52.35	AAAA
ATOM	1927	N	THR A 249	-15.765	78.028	25.646	1.00	52.66	AAAA
ATOM	1928	CA	THR A 249	-16.838	79.017	25.595	1.00	54.32	AAAA
ATOM	1929	CB	THR A 249	-17.575	79.028	24.214	1.00	54.98	AAAA
ATOM	1930	OG1	THR A 249	-18.420	77.871	24.096	1.00	54.34	AAAA
ATOM	1931	CG2	THR A 249	-16.570	79.058	23.064	1.00	54.03	AAAA
ATOM	1932	C	THR A 249	-17.869	78.746	26.668	1.00	54.95	AAAA
ATOM	1933	O	THR A 249	-19.025	79.129	26.544	1.00	57.09	AAAA
ATOM	1934	N	THR A 250	-17.450	78.091	27.734	1.00	55.43	AAAA
ATOM	1935	CA	THR A 250	-18.375	77.769	28.806	1.00	55.67	AAAA
ATOM	1936	CB	THR A 250	-18.921	76.340	28.643	1.00	56.52	AAAA
ATOM	1937	OG1	THR A 250	-19.473	76.190	27.334	1.00	59.78	AAAA
ATOM	1938	CG2	THR A 250	-19.992	76.054	29.669	1.00	56.31	AAAA
ATOM	1939	C	THR A 250	-17.659	77.837	30.133	1.00	55.14	AAAA
ATOM	1940	O	THR A 250	-18.299	77.905	31.183	1.00	55.72	AAAA
ATOM	1941	N	TYR A 251	-16.327	77.825	30.069	1.00	53.45	AAAA
ATOM	1942	CA	TYR A 251	-15.495	77.827	31.260	1.00	50.54	AAAA
ATOM	1943	CB	TYR A 251	-15.534	79.181	31.947	1.00	48.07	AAAA
ATOM	1944	CG	TYR A 251	-15.030	80.275	31.060	1.00	46.80	AAAA
ATOM	1945	CD1	TYR A 251	-15.801	80.735	29.986	1.00	47.87	AAAA

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ATOM	1946	CE1	TYR	A	251	-15.316	81.735	29.125	1.00	46.95	AAAA
ATOM	1947	CD2	TYR	A	251	-13.764	80.833	31.262	1.00	45.01	AAAA
ATOM	1948	CE2	TYR	A	251	-13.271	81.826	30.418	1.00	46.07	AAAA
ATOM	1949	CZ	TYR	A	251	-14.051	82.274	29.349	1.00	47.04	AAAA
ATOM	1950	OH	TYR	A	251	-13.570	83.259	28.513	1.00	46.92	AAAA
ATOM	1951	C	TYR	A	251	-16.102	76.757	32.137	1.00	50.21	AAAA
ATOM	1952	O	TYR	A	251	-16.393	76.977	33.316	1.00	48.01	AAAA
ATOM	1953	N	GLN	A	252	-16.314	75.601	31.516	1.00	50.16	AAAA
ATOM	1954	CA	GLN	A	252	-16.899	74.457	32.186	1.00	52.20	AAAA
ATOM	1955	CB	GLN	A	252	-18.413	74.485	32.018	1.00	53.68	AAAA
ATOM	1956	CG	GLN	A	252	-19.134	73.546	32.953	1.00	57.93	AAAA
ATOM	1957	CD	GLN	A	252	-18.798	73.835	34.398	1.00	60.07	AAAA
ATOM	1958	OE1	GLN	A	252	-19.125	74.906	34.922	1.00	59.29	AAAA
ATOM	1959	NE2	GLN	A	252	-18.123	72.885	35.050	1.00	62.01	AAAA
ATOM	1960	C	GLN	A	252	-16.342	73.155	31.622	1.00	52.36	AAAA
ATOM	1961	O	GLN	A	252	-15.834	73.120	30.506	1.00	54.07	AAAA
ATOM	1962	N	MET	A	253	-16.426	72.085	32.402	1.00	52.31	AAAA
ATOM	1963	CA	MET	A	253	-15.930	70.798	31.948	1.00	51.56	AAAA
ATOM	1964	CB	MET	A	253	-15.300	70.000	33.100	1.00	47.96	AAAA
ATOM	1965	CG	MET	A	253	-14.058	70.603	33.739	1.00	42.98	AAAA
ATOM	1966	SD	MET	A	253	-12.751	70.938	32.564	1.00	41.36	AAAA
ATOM	1967	CE	MET	A	253	-12.346	69.315	32.007	1.00	38.38	AAAA
ATOM	1968	C	MET	A	253	-17.089	70.002	31.385	1.00	53.96	AAAA
ATOM	1969	O	MET	A	253	-18.081	69.772	32.078	1.00	54.78	AAAA
ATOM	1970	N	ASP	A	254	-16.963	69.593	30.125	1.00	56.61	AAAA
ATOM	1971	CA	ASP	A	254	-17.981	68.787	29.459	1.00	58.55	AAAA
ATOM	1972	CB	ASP	A	254	-18.135	69.205	27.993	1.00	58.42	AAAA
ATOM	1973	CG	ASP	A	254	-18.710	70.597	27.841	1.00	59.84	AAAA
ATOM	1974	OD1	ASP	A	254	-18.569	71.176	26.747	1.00	59.99	AAAA
ATOM	1975	OD2	ASP	A	254	-19.310	71.112	28.808	1.00	61.08	AAAA
ATOM	1976	C	ASP	A	254	-17.514	67.339	29.526	1.00	60.18	AAAA
ATOM	1977	O	ASP	A	254	-16.316	67.066	29.644	1.00	59.54	AAAA
ATOM	1978	N	VAL	A	255	-18.461	66.414	29.451	1.00	61.88	AAAA
ATOM	1979	CA	VAL	A	255	-18.142	64.997	29.506	1.00	63.18	AAAA
ATOM	1980	CB	VAL	A	255	-19.310	64.195	30.088	1.00	62.28	AAAA
ATOM	1981	CG1	VAL	A	255	-19.010	62.710	30.002	1.00	62.53	AAAA
ATOM	1982	CG2	VAL	A	255	-19.552	64.608	31.522	1.00	61.52	AAAA
ATOM	1983	C	VAL	A	255	-17.830	64.442	28.127	1.00	64.24	AAAA
ATOM	1984	O	VAL	A	255	-18.686	64.452	27.252	1.00	65.57	AAAA
ATOM	1985	N	ASN	A	256	-16.607	63.960	27.931	1.00	64.99	AAAA
ATOM	1986	CA	ASN	A	256	-16.234	63.385	26.649	1.00	65.59	AAAA
ATOM	1987	CB	ASN	A	256	-14.720	63.292	26.505	1.00	64.80	AAAA
ATOM	1988	CG	ASN	A	256	-14.308	62.740	25.154	1.00	65.41	AAAA
ATOM	1989	OD1	ASN	A	256	-15.119	62.135	24.450	1.00	66.45	AAAA
ATOM	1990	ND2	ASN	A	256	-13.046	62.933	24.787	1.00	64.10	AAAA
ATOM	1991	C	ASN	A	256	-16.821	61.984	26.571	1.00	66.88	AAAA
ATOM	1992	O	ASN	A	256	-16.453	61.108	27.351	1.00	67.44	AAAA
ATOM	1993	N	PRO	A	257	-17.738	61.747	25.622	1.00	68.28	AAAA
ATOM	1994	CD	PRO	A	257	-18.205	62.633	24.539	1.00	67.80	AAAA
ATOM	1995	CA	PRO	A	257	-18.337	60.414	25.504	1.00	68.62	AAAA
ATOM	1996	CB	PRO	A	257	-19.445	60.632	24.480	1.00	68.57	AAAA
ATOM	1997	CG	PRO	A	257	-18.836	61.656	23.568	1.00	68.81	AAAA
ATOM	1998	C	PRO	A	257	-17.317	59.359	25.063	1.00	68.79	AAAA
ATOM	1999	O	PRO	A	257	-17.508	58.164	25.299	1.00	68.77	AAAA
ATOM	2000	N	GLU	A	258	-16.233	59.813	24.435	1.00	68.17	AAAA
ATOM	2001	CA	GLU	A	258	-15.181	58.918	23.959	1.00	68.45	AAAA
ATOM	2002	CB	GLU	A	258	-14.702	59.352	22.573	1.00	70.09	AAAA
ATOM	2003	CG	GLU	A	258	-15.646	58.958	21.458	1.00	73.60	AAAA
ATOM	2004	CD	GLU	A	258	-15.040	59.164	20.092	1.00	75.72	AAAA
ATOM	2005	OE1	GLU	A	258	-14.860	60.333	19.694	1.00	76.89	AAAA
ATOM	2006	OE2	GLU	A	258	-14.739	58.154	19.419	1.00	77.34	AAAA
ATOM	2007	C	GLU	A	258	-13.982	58.830	24.894	1.00	67.48	AAAA
ATOM	2008	O	GLU	A	258	-12.866	58.531	24.461	1.00	66.70	AAAA
ATOM	2009	N	GLY	A	259	-14.215	59.085	26.176	1.00	66.17	AAAA
ATOM	2010	CA	GLY	A	259	-13.131	59.031	27.137	1.00	63.66	AAAA
ATOM	2011	C	GLY	A	259	-12.830	57.628	27.616	1.00	62.15	AAAA
ATOM	2012	O	GLY	A	259	-13.679	56.733	27.545	1.00	60.63	AAAA
ATOM	2013	N	LYS	A	260	-11.607	57.442	28.101	1.00	61.06	AAAA
ATOM	2014	CA	LYS	A	260	-11.161	56.155	28.619	1.00	60.17	AAAA
ATOM	2015	CB	LYS	A	260	-10.509	55.336	27.503	1.00	60.58	AAAA
ATOM	2016	CG	LYS	A	260	-11.434	55.038	26.339	1.00	61.51	AAAA
ATOM	2017	CD	LYS	A	260	-10.804	54.049	25.375	1.00	63.16	AAAA
ATOM	2018	CE	LYS	A	260	-11.570	53.993	24.064	1.00	65.08	AAAA
ATOM	2019	NZ	LYS	A	260	-13.018	53.689	24.266	1.00	66.94	AAAA
ATOM	2020	C	LYS	A	260	-10.173	56.349	29.776	1.00	58.44	AAAA

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ATOM	2021	O	LYS A 260	-9.785	57.479	30.088	1.00	57.91	AAAA
ATOM	2022	N	TYR A 261	-9.772	55.248	30.409	1.00	55.67	AAAA
ATOM	2023	CA	TYR A 261	-8.831	55.309	31.522	1.00	52.07	AAAA
ATOM	2024	CB	TYR A 261	-9.318	54.464	32.690	1.00	49.48	AAAA
ATOM	2025	CG	TYR A 261	-10.607	54.936	33.297	1.00	47.00	AAAA
ATOM	2026	CD1	TYR A 261	-11.832	54.632	32.715	1.00	44.34	AAAA
ATOM	2027	CE1	TYR A 261	-13.019	55.084	33.273	1.00	43.38	AAAA
ATOM	2028	CD2	TYR A 261	-10.600	55.705	34.453	1.00	47.13	AAAA
ATOM	2029	CE2	TYR A 261	-11.785	56.166	35.017	1.00	46.03	AAAA
ATOM	2030	CZ	TYR A 261	-12.986	55.852	34.422	1.00	44.23	AAAA
ATOM	2031	OH	TYR A 261	-14.142	56.325	34.991	1.00	45.72	AAAA
ATOM	2032	C	TYR A 261	-7.447	54.828	31.148	1.00	51.74	AAAA
ATOM	2033	O	TYR A 261	-7.286	53.985	30.267	1.00	52.11	AAAA
ATOM	2034	N	SER A 262	-6.448	55.373	31.830	1.00	50.75	AAAA
ATOM	2035	CA	SER A 262	-5.067	54.980	31.602	1.00	50.14	AAAA
ATOM	2036	CB	SER A 262	-4.106	56.119	31.965	1.00	49.74	AAAA
ATOM	2037	OG	SER A 262	-4.173	57.192	31.046	1.00	48.23	AAAA
ATOM	2038	C	SER A 262	-4.754	53.770	32.477	1.00	49.93	AAAA
ATOM	2039	O	SER A 262	-4.935	53.802	33.691	1.00	49.99	AAAA
ATOM	2040	N	PHE A 263	-4.293	52.700	31.849	1.00	50.71	AAAA
ATOM	2041	CA	PHE A 263	-3.927	51.481	32.559	1.00	51.05	AAAA
ATOM	2042	CB	PHE A 263	-5.008	50.419	32.387	1.00	54.72	AAAA
ATOM	2043	CG	PHE A 263	-4.768	49.167	33.187	1.00	59.61	AAAA
ATOM	2044	CD1	PHE A 263	-4.431	47.970	32.549	1.00	60.53	AAAA
ATOM	2045	CD2	PHE A 263	-4.906	49.173	34.578	1.00	60.22	AAAA
ATOM	2046	CE1	PHE A 263	-4.239	46.802	33.285	1.00	60.70	AAAA
ATOM	2047	CE2	PHE A 263	-4.715	48.006	35.325	1.00	60.28	AAAA
ATOM	2048	CZ	PHE A 263	-4.384	46.822	34.679	1.00	60.95	AAAA
ATOM	2049	C	PHE A 263	-2.638	51.028	31.904	1.00	50.56	AAAA
ATOM	2050	O	PHE A 263	-2.646	50.424	30.827	1.00	49.12	AAAA
ATOM	2051	N	GLY A 264	-1.523	51.341	32.547	1.00	50.31	AAAA
ATOM	2052	CA	GLY A 264	-0.251	50.973	31.971	1.00	49.70	AAAA
ATOM	2053	C	GLY A 264	-0.161	51.724	30.665	1.00	49.89	AAAA
ATOM	2054	O	GLY A 264	-0.469	52.910	30.618	1.00	52.14	AAAA
ATOM	2055	N	ALA A 265	0.233	51.038	29.600	1.00	49.30	AAAA
ATOM	2056	CA	ALA A 265	0.372	51.670	28.297	1.00	47.40	AAAA
ATOM	2057	CB	ALA A 265	1.608	51.139	27.602	1.00	46.31	AAAA
ATOM	2058	C	ALA A 265	-0.851	51.438	27.427	1.00	47.46	AAAA
ATOM	2059	O	ALA A 265	-0.746	51.420	26.203	1.00	46.68	AAAA
ATOM	2060	N	THR A 266	-2.011	51.274	28.055	1.00	48.17	AAAA
ATOM	2061	CA	THR A 266	-3.241	51.022	27.311	1.00	49.65	AAAA
ATOM	2062	CB	THR A 266	-3.622	49.508	27.353	1.00	48.58	AAAA
ATOM	2063	OG1	THR A 266	-4.029	49.154	28.676	1.00	48.91	AAAA
ATOM	2064	CG2	THR A 266	-2.437	48.631	26.961	1.00	46.18	AAAA
ATOM	2065	C	THR A 266	-4.422	51.821	27.860	1.00	50.98	AAAA
ATOM	2066	O	THR A 266	-4.452	52.157	29.042	1.00	51.40	AAAA
ATOM	2067	N	CYS A 267	-5.391	52.123	26.996	1.00	52.99	AAAA
ATOM	2068	CA	CYS A 267	-6.590	52.860	27.406	1.00	55.11	AAAA
ATOM	2069	C	CYS A 267	-7.748	51.875	27.434	1.00	56.75	AAAA
ATOM	2070	O	CYS A 267	-7.919	51.090	26.500	1.00	57.16	AAAA
ATOM	2071	CB	CYS A 267	-6.899	53.982	26.424	1.00	54.20	AAAA
ATOM	2072	SG	CYS A 267	-5.445	54.981	25.989	1.00	57.74	AAAA
ATOM	2073	N	VAL A 268	-8.551	51.926	28.493	1.00	58.27	AAAA
ATOM	2074	CA	VAL A 268	-9.665	50.994	28.639	1.00	59.25	AAAA
ATOM	2075	CB	VAL A 268	-9.274	49.880	29.630	1.00	58.62	AAAA
ATOM	2076	CG1	VAL A 268	-8.097	49.103	29.086	1.00	56.64	AAAA
ATOM	2077	CG2	VAL A 268	-8.897	50.491	30.975	1.00	57.47	AAAA
ATOM	2078	C	VAL A 268	-10.958	51.652	29.114	1.00	60.54	AAAA
ATOM	2079	O	VAL A 268	-10.937	52.767	29.629	1.00	61.52	AAAA
ATOM	2080	N	LYS A 269	-12.078	50.954	28.951	1.00	62.34	AAAA
ATOM	2081	CA	LYS A 269	-13.380	51.481	29.371	1.00	64.85	AAAA
ATOM	2082	CB	LYS A 269	-14.519	50.526	28.980	1.00	65.55	AAAA
ATOM	2083	CG	LYS A 269	-14.599	50.181	27.497	1.00	65.87	AAAA
ATOM	2084	CD	LYS A 269	-13.430	49.300	27.080	1.00	67.45	AAAA
ATOM	2085	CE	LYS A 269	-13.376	48.026	27.921	1.00	67.70	AAAA
ATOM	2086	NZ	LYS A 269	-12.118	47.260	27.712	1.00	68.36	AAAA
ATOM	2087	C	LYS A 269	-13.435	51.728	30.876	1.00	65.72	AAAA
ATOM	2088	O	LYS A 269	-13.788	52.815	31.314	1.00	66.07	AAAA
ATOM	2089	N	LYS A 270	-13.102	50.719	31.669	1.00	67.79	AAAA
ATOM	2090	CA	LYS A 270	-13.110	50.879	33.122	1.00	71.12	AAAA
ATOM	2091	CB	LYS A 270	-14.368	50.248	33.736	1.00	72.73	AAAA
ATOM	2092	CG	LYS A 270	-15.687	50.815	33.190	1.00	76.20	AAAA
ATOM	2093	CD	LYS A 270	-15.802	52.330	33.369	1.00	76.38	AAAA
ATOM	2094	CE	LYS A 270	-16.264	52.722	34.767	1.00	78.14	AAAA
ATOM	2095	NZ	LYS A 270	-17.710	52.436	34.986	1.00	78.22	AAAA

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ATOM	2096	C	LYS	A	270	-11.863	50.257	33.745	1.00	71.54	AAAA
ATOM	2097	O	LYS	A	270	-11.283	49.312	33.197	1.00	71.77	AAAA
ATOM	2098	N	CYS	A	271	-11.436	50.796	34.883	1.00	70.78	AAAA
ATOM	2099	CA	CYS	A	271	-10.257	50.255	35.536	1.00	70.35	AAAA
ATOM	2100	C	CYS	A	271	-10.536	48.825	35.943	1.00	71.95	AAAA
ATOM	2101	O	CYS	A	271	-11.689	48.456	36.176	1.00	72.17	AAAA
ATOM	2102	CB	CYS	A	271	-9.887	51.075	36.767	1.00	67.01	AAAA
ATOM	2103	SG	CYS	A	271	-9.176	52.695	36.367	1.00	62.70	AAAA
ATOM	2104	N	PRO	A	272	-9.485	47.993	36.015	1.00	73.29	AAAA
ATOM	2105	CD	PRO	A	272	-8.143	48.228	35.461	1.00	73.55	AAAA
ATOM	2106	CA	PRO	A	272	-9.641	46.589	36.401	1.00	74.19	AAAA
ATOM	2107	CB	PRO	A	272	-8.301	45.965	36.008	1.00	74.11	AAAA
ATOM	2108	CG	PRO	A	272	-7.800	46.865	34.918	1.00	75.07	AAAA
ATOM	2109	C	PRO	A	272	-9.914	46.456	37.893	1.00	75.58	AAAA
ATOM	2110	O	PRO	A	272	-10.002	47.454	38.618	1.00	74.67	AAAA
ATOM	2111	N	ARG	A	273	-10.029	45.211	38.343	1.00	77.35	AAAA
ATOM	2112	CA	ARG	A	273	-10.301	44.918	39.742	1.00	77.99	AAAA
ATOM	2113	CB	ARG	A	273	-10.834	43.488	39.875	1.00	80.91	AAAA
ATOM	2114	CG	ARG	A	273	-11.848	43.098	38.805	1.00	85.02	AAAA
ATOM	2115	CD	ARG	A	273	-13.084	43.993	38.836	1.00	88.44	AAAA
ATOM	2116	NE	ARG	A	273	-13.889	43.848	37.624	1.00	89.23	AAAA
ATOM	2117	CZ	ARG	A	273	-14.981	44.558	37.350	1.00	89.65	AAAA
ATOM	2118	NH1	ARG	A	273	-15.415	45.477	38.205	1.00	89.11	AAAA
ATOM	2119	NH2	ARG	A	273	-15.638	44.349	36.215	1.00	88.99	AAAA
ATOM	2120	C	ARG	A	273	-9.061	45.086	40.619	1.00	76.88	AAAA
ATOM	2121	O	ARG	A	273	-7.973	44.599	40.289	1.00	76.21	AAAA
ATOM	2122	N	ASN	A	274	-9.245	45.799	41.727	1.00	74.92	AAAA
ATOM	2123	CA	ASN	A	274	-8.200	46.043	42.718	1.00	73.59	AAAA
ATOM	2124	CB	ASN	A	274	-7.401	44.754	42.968	1.00	72.11	AAAA
ATOM	2125	CG	ASN	A	274	-6.805	44.699	44.366	1.00	70.44	AAAA
ATOM	2126	OD1	ASN	A	274	-7.502	44.904	45.359	1.00	66.95	AAAA
ATOM	2127	ND2	ASN	A	274	-5.512	44.411	44.447	1.00	71.38	AAAA
ATOM	2128	C	ASN	A	274	-7.251	47.214	42.433	1.00	72.90	AAAA
ATOM	2129	O	ASN	A	274	-6.244	47.392	43.125	1.00	72.58	AAAA
ATOM	2130	N	TYR	A	275	-7.561	48.004	41.413	1.00	71.12	AAAA
ATOM	2131	CA	TYR	A	275	-6.751	49.174	41.108	1.00	68.67	AAAA
ATOM	2132	CB	TYR	A	275	-6.455	49.276	39.616	1.00	67.88	AAAA
ATOM	2133	CG	TYR	A	275	-5.250	48.481	39.190	1.00	67.42	AAAA
ATOM	2134	CD1	TYR	A	275	-5.275	47.089	39.191	1.00	68.27	AAAA
ATOM	2135	CE1	TYR	A	275	-4.152	46.348	38.830	1.00	68.51	AAAA
ATOM	2136	CD2	TYR	A	275	-4.071	49.120	38.815	1.00	66.02	AAAA
ATOM	2137	CE2	TYR	A	275	-2.945	48.393	38.453	1.00	67.51	AAAA
ATOM	2138	CZ	TYR	A	275	-2.991	47.005	38.465	1.00	68.39	AAAA
ATOM	2139	OH	TYR	A	275	-1.874	46.276	38.127	1.00	67.65	AAAA
ATOM	2140	C	TYR	A	275	-7.575	50.361	41.551	1.00	67.62	AAAA
ATOM	2141	O	TYR	A	275	-8.785	50.251	41.710	1.00	67.44	AAAA
ATOM	2142	N	VAL	A	276	-6.934	51.496	41.765	1.00	67.45	AAAA
ATOM	2143	CA	VAL	A	276	-7.676	52.666	42.192	1.00	68.16	AAAA
ATOM	2144	CB	VAL	A	276	-6.932	53.423	43.296	1.00	68.04	AAAA
ATOM	2145	CG1	VAL	A	276	-7.734	54.635	43.721	1.00	67.32	AAAA
ATOM	2146	CG2	VAL	A	276	-6.692	52.501	44.472	1.00	66.99	AAAA
ATOM	2147	C	VAL	A	276	-7.927	53.602	41.023	1.00	68.99	AAAA
ATOM	2148	O	VAL	A	276	-7.072	53.766	40.151	1.00	68.87	AAAA
ATOM	2149	N	VAL	A	277	-9.111	54.207	41.011	1.00	70.12	AAAA
ATOM	2150	CA	VAL	A	277	-9.498	55.134	39.953	1.00	70.77	AAAA
ATOM	2151	CB	VAL	A	277	-10.972	54.904	39.539	1.00	71.08	AAAA
ATOM	2152	CG1	VAL	A	277	-11.331	55.781	38.354	1.00	71.16	AAAA
ATOM	2153	CG2	VAL	A	277	-11.184	53.436	39.192	1.00	70.28	AAAA
ATOM	2154	C	VAL	A	277	-9.307	56.574	40.425	1.00	70.34	AAAA
ATOM	2155	O	VAL	A	277	-9.801	56.963	41.482	1.00	69.53	AAAA
ATOM	2156	N	THR	A	278	-8.583	57.359	39.634	1.00	70.66	AAAA
ATOM	2157	CA	THR	A	278	-8.306	58.745	39.977	1.00	71.39	AAAA
ATOM	2158	CB	THR	A	278	-6.857	59.096	39.653	1.00	72.21	AAAA
ATOM	2159	OG1	THR	A	278	-6.035	57.944	39.859	1.00	71.71	AAAA
ATOM	2160	CG2	THR	A	278	-6.370	60.218	40.564	1.00	73.70	AAAA
ATOM	2161	C	THR	A	278	-9.202	59.752	39.261	1.00	71.78	AAAA
ATOM	2162	O	THR	A	278	-9.924	59.413	38.326	1.00	71.98	AAAA
ATOM	2163	N	ASP	A	279	-9.138	60.999	39.719	1.00	72.04	AAAA
ATOM	2164	CA	ASP	A	279	-9.912	62.097	39.148	1.00	71.77	AAAA
ATOM	2165	CB	ASP	A	279	-9.657	63.381	39.944	1.00	73.33	AAAA
ATOM	2166	CG	ASP	A	279	-10.280	63.348	41.329	1.00	75.58	AAAA
ATOM	2167	OD1	ASP	A	279	-9.850	64.147	42.193	1.00	76.34	AAAA
ATOM	2168	OD2	ASP	A	279	-11.206	62.536	41.548	1.00	76.36	AAAA
ATOM	2169	C	ASP	A	279	-9.532	62.339	37.692	1.00	70.56	AAAA
ATOM	2170	O	ASP	A	279	-10.310	62.899	36.924	1.00	71.03	AAAA

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ATOM	2171	N	HIS	A	280	-8.329	61.906	37.328	1.00	68.86	AAAA
ATOM	2172	CA	HIS	A	280	-7.794	62.081	35.982	1.00	66.47	AAAA
ATOM	2173	CB	HIS	A	280	-6.281	62.266	36.058	1.00	66.61	AAAA
ATOM	2174	CG	HIS	A	280	-5.851	63.265	37.081	1.00	66.61	AAAA
ATOM	2175	CD2	HIS	A	280	-5.150	63.119	38.229	1.00	67.87	AAAA
ATOM	2176	ND1	HIS	A	280	-6.155	64.605	36.985	1.00	67.29	AAAA
ATOM	2177	CE1	HIS	A	280	-5.658	65.241	38.030	1.00	67.94	AAAA
ATOM	2178	NE2	HIS	A	280	-5.044	64.362	38.800	1.00	66.93	AAAA
ATOM	2179	C	HIS	A	280	-8.099	60.922	35.043	1.00	65.12	AAAA
ATOM	2180	O	HIS	A	280	-7.426	60.749	34.026	1.00	65.02	AAAA
ATOM	2181	N	GLY	A	281	-9.104	60.127	35.382	1.00	63.61	AAAA
ATOM	2182	CA	GLY	A	281	-9.453	59.002	34.535	1.00	61.53	AAAA
ATOM	2183	C	GLY	A	281	-8.276	58.084	34.273	1.00	59.92	AAAA
ATOM	2184	O	GLY	A	281	-7.904	57.852	33.124	1.00	60.61	AAAA
ATOM	2185	N	SER	A	282	-7.687	57.566	35.346	1.00	58.23	AAAA
ATOM	2186	CA	SER	A	282	-6.548	56.658	35.241	1.00	56.74	AAAA
ATOM	2187	CB	SER	A	282	-5.228	57.442	35.277	1.00	56.18	AAAA
ATOM	2188	OG	SER	A	282	-5.042	58.098	36.523	1.00	56.20	AAAA
ATOM	2189	C	SER	A	282	-6.577	55.645	36.382	1.00	55.75	AAAA
ATOM	2190	O	SER	A	282	-7.183	55.885	37.425	1.00	55.71	AAAA
ATOM	2191	N	CYS	A	283	-5.921	54.510	36.179	1.00	54.44	AAAA
ATOM	2192	CA	CYS	A	283	-5.882	53.468	37.189	1.00	54.50	AAAA
ATOM	2193	C	CYS	A	283	-4.500	53.430	37.827	1.00	53.90	AAAA
ATOM	2194	O	CYS	A	283	-3.505	53.141	37.159	1.00	51.70	AAAA
ATOM	2195	CB	CYS	A	283	-6.206	52.127	36.543	1.00	57.15	AAAA
ATOM	2196	SG	CYS	A	283	-7.518	52.257	35.290	1.00	57.30	AAAA
ATOM	2197	N	VAL	A	284	-4.451	53.731	39.122	1.00	53.41	AAAA
ATOM	2198	CA	VAL	A	284	-3.196	53.763	39.861	1.00	53.72	AAAA
ATOM	2199	CB	VAL	A	284	-2.983	55.121	40.542	1.00	52.30	AAAA
ATOM	2200	CG1	VAL	A	284	-3.075	56.238	39.516	1.00	51.69	AAAA
ATOM	2201	CG2	VAL	A	284	-4.004	55.311	41.647	1.00	49.69	AAAA
ATOM	2202	C	VAL	A	284	-3.184	52.715	40.949	1.00	55.99	AAAA
ATOM	2203	O	VAL	A	284	-4.244	52.252	41.376	1.00	55.32	AAAA
ATOM	2204	N	ARG	A	285	-1.980	52.362	41.405	1.00	58.06	AAAA
ATOM	2205	CA	ARG	A	285	-1.809	51.366	42.459	1.00	59.96	AAAA
ATOM	2206	CB	ARG	A	285	-0.590	50.490	42.165	1.00	58.37	AAAA
ATOM	2207	CG	ARG	A	285	-0.799	49.572	40.978	1.00	59.24	AAAA
ATOM	2208	CD	ARG	A	285	0.003	48.293	41.105	1.00	58.41	AAAA
ATOM	2209	NE	ARG	A	285	1.408	48.466	40.756	1.00	58.50	AAAA
ATOM	2210	CZ	ARG	A	285	1.940	48.059	39.609	1.00	57.44	AAAA
ATOM	2211	NH1	ARG	A	285	1.173	47.459	38.709	1.00	55.75	AAAA
ATOM	2212	NH2	ARG	A	285	3.235	48.238	39.370	1.00	55.65	AAAA
ATOM	2213	C	ARG	A	285	-1.678	52.002	43.838	1.00	62.01	AAAA
ATOM	2214	O	ARG	A	285	-1.771	51.324	44.857	1.00	60.61	AAAA
ATOM	2215	N	ALA	A	286	-1.466	53.312	43.860	1.00	66.35	AAAA
ATOM	2216	CA	ALA	A	286	-1.334	54.050	45.109	1.00	70.62	AAAA
ATOM	2217	CB	ALA	A	286	0.088	53.961	45.615	1.00	70.20	AAAA
ATOM	2218	C	ALA	A	286	-1.711	55.503	44.870	1.00	74.36	AAAA
ATOM	2219	O	ALA	A	286	-1.322	56.088	43.858	1.00	73.97	AAAA
ATOM	2220	N	CYS	A	287	-2.470	56.083	45.796	1.00	78.98	AAAA
ATOM	2221	CA	CYS	A	287	-2.890	57.473	45.667	1.00	84.13	AAAA
ATOM	2222	C	CYS	A	287	-1.738	58.409	46.010	1.00	87.57	AAAA
ATOM	2223	O	CYS	A	287	-0.573	58.006	46.041	1.00	87.23	AAAA
ATOM	2224	CB	CYS	A	287	-4.063	57.781	46.603	1.00	85.98	AAAA
ATOM	2225	SG	CYS	A	287	-5.516	56.690	46.471	1.00	89.26	AAAA
ATOM	2226	N	GLY	A	288	-2.082	59.666	46.277	1.00	91.71	AAAA
ATOM	2227	CA	GLY	A	288	-1.084	60.660	46.625	1.00	95.74	AAAA
ATOM	2228	C	GLY	A	288	-1.011	60.866	48.125	1.00	98.59	AAAA
ATOM	2229	O	GLY	A	288	-1.816	60.314	48.879	1.00	98.93	AAAA
ATOM	2230	N	ALA	A	289	-0.046	61.668	48.559	1.00	100.90	AAAA
ATOM	2231	CA	ALA	A	289	0.143	61.941	49.976	1.00	103.37	AAAA
ATOM	2232	CB	ALA	A	289	1.262	62.959	50.157	1.00	103.87	AAAA
ATOM	2233	C	ALA	A	289	-1.128	62.440	50.656	1.00	104.94	AAAA
ATOM	2234	O	ALA	A	289	-1.440	62.041	51.780	1.00	105.13	AAAA
ATOM	2235	N	ALA	A	290	-1.864	63.303	49.966	1.00	106.71	AAAA
ATOM	2236	CA	ALA	A	290	-3.084	63.880	50.515	1.00	108.56	AAAA
ATOM	2237	CB	ALA	A	290	-3.371	65.210	49.829	1.00	108.76	AAAA
ATOM	2238	C	ALA	A	290	-4.330	62.997	50.459	1.00	109.65	AAAA
ATOM	2239	O	ALA	A	290	-5.227	63.146	51.287	1.00	110.13	AAAA
ATOM	2240	N	SER	A	291	-4.392	62.078	49.500	1.00	110.47	AAAA
ATOM	2241	CA	SER	A	291	-5.568	61.217	49.355	1.00	110.94	AAAA
ATOM	2242	CB	SER	A	291	-5.756	60.841	47.879	1.00	111.25	AAAA
ATOM	2243	OG	SER	A	291	-5.889	61.990	47.060	1.00	111.60	AAAA
ATOM	2244	C	SER	A	291	-5.565	59.937	50.191	1.00	110.77	AAAA
ATOM	2245	O	SER	A	291	-4.631	59.669	50.947	1.00	110.38	AAAA

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ATOM	2246	N	TYR	A	292	-6.642	59.169	50.044	1.00110.58	AAAA
ATOM	2247	CA	TYR	A	292	-6.823	57.887	50.717	1.00111.08	AAAA
ATOM	2248	CB	TYR	A	292	-7.460	58.056	52.107	1.00112.17	AAAA
ATOM	2249	CG	TYR	A	292	-8.793	58.779	52.162	1.00113.92	AAAA
ATOM	2250	CD1	TYR	A	292	-9.701	58.514	53.193	1.00114.53	AAAA
ATOM	2251	CE1	TYR	A	292	-10.915	59.195	53.283	1.00114.37	AAAA
ATOM	2252	CD2	TYR	A	292	-9.138	59.749	51.220	1.00114.20	AAAA
ATOM	2253	CE2	TYR	A	292	-10.348	60.437	51.305	1.00113.79	AAAA
ATOM	2254	CZ	TYR	A	292	-11.230	60.154	52.336	1.00114.12	AAAA
ATOM	2255	OH	TYR	A	292	-12.424	60.830	52.419	1.00114.01	AAAA
ATOM	2256	C	TYR	A	292	-7.697	57.007	49.820	1.00110.58	AAAA
ATOM	2257	O	TYR	A	292	-7.693	57.189	48.605	1.00111.08	AAAA
ATOM	2258	N	GLU	A	293	-8.444	56.065	50.393	1.00109.66	AAAA
ATOM	2259	CA	GLU	A	293	-9.284	55.187	49.573	1.00108.40	AAAA
ATOM	2260	CB	GLU	A	293	-8.604	53.818	49.423	1.00107.24	AAAA
ATOM	2261	CG	GLU	A	293	-7.357	53.841	48.534	1.00105.27	AAAA
ATOM	2262	CD	GLU	A	293	-6.773	52.456	48.279	1.00104.14	AAAA
ATOM	2263	OE1	GLU	A	293	-7.556	51.517	48.023	1.00103.24	AAAA
ATOM	2264	OE2	GLU	A	293	-5.530	52.310	48.318	1.00102.37	AAAA
ATOM	2265	C	GLU	A	293	-10.726	54.998	50.058	1.00108.20	AAAA
ATOM	2266	O	GLU	A	293	-10.982	54.941	51.259	1.00108.35	AAAA
ATOM	2267	N	MET	A	294	-11.659	54.905	49.108	1.00108.11	AAAA
ATOM	2268	CA	MET	A	294	-13.084	54.711	49.408	1.00108.11	AAAA
ATOM	2269	CB	MET	A	294	-13.832	56.052	49.360	1.00108.76	AAAA
ATOM	2270	CG	MET	A	294	-15.309	55.960	49.756	1.00109.70	AAAA
ATOM	2271	SD	MET	A	294	-16.180	57.555	49.823	1.00110.19	AAAA
ATOM	2272	CE	MET	A	294	-17.304	57.407	48.426	1.00109.59	AAAA
ATOM	2273	C	MET	A	294	-13.715	53.743	48.404	1.00107.62	AAAA
ATOM	2274	O	MET	A	294	-13.478	53.851	47.202	1.00107.43	AAAA
ATOM	2275	N	ALA	A	295	-14.521	52.802	48.893	1.00107.51	AAAA
ATOM	2276	CA	ALA	A	295	-15.162	51.822	48.015	1.00107.97	AAAA
ATOM	2277	CB	ALA	A	295	-14.255	50.606	47.852	1.00107.46	AAAA
ATOM	2278	C	ALA	A	295	-16.544	51.377	48.496	1.00108.19	AAAA
ATOM	2279	O	ALA	A	295	-17.393	52.209	48.823	1.00108.59	AAAA
ATOM	2280	N	GLU	A	296	-16.757	50.059	48.517	1.00108.13	AAAA
ATOM	2281	CA	GLU	A	296	-18.016	49.436	48.947	1.00107.58	AAAA
ATOM	2282	CB	GLU	A	296	-18.336	49.812	50.394	1.00107.42	AAAA
ATOM	2283	CG	GLU	A	296	-17.881	48.755	51.370	1.00106.73	AAAA
ATOM	2284	CD	GLU	A	296	-18.132	47.364	50.828	1.00106.38	AAAA
ATOM	2285	OE1	GLU	A	296	-19.295	47.058	50.496	1.00105.96	AAAA
ATOM	2286	OE2	GLU	A	296	-17.166	46.582	50.722	1.00106.41	AAAA
ATOM	2287	C	GLU	A	296	-19.226	49.716	48.069	1.00107.13	AAAA
ATOM	2288	O	GLU	A	296	-20.118	48.878	47.934	1.00105.58	AAAA
ATOM	2289	N	ASP	A	297	-19.251	50.908	47.489	1.00108.00	AAAA
ATOM	2290	CA	ASP	A	297	-20.319	51.325	46.593	1.00108.25	AAAA
ATOM	2291	CB	ASP	A	297	-21.196	52.387	47.262	1.00108.16	AAAA
ATOM	2292	CG	ASP	A	297	-22.439	51.794	47.898	1.00108.19	AAAA
ATOM	2293	OD1	ASP	A	297	-23.127	52.512	48.654	1.00107.93	AAAA
ATOM	2294	OD2	ASP	A	297	-22.733	50.609	47.632	1.00108.13	AAAA
ATOM	2295	C	ASP	A	297	-19.669	51.872	45.323	1.00108.10	AAAA
ATOM	2296	O	ASP	A	297	-19.497	53.083	45.155	1.00107.89	AAAA
ATOM	2297	N	GLY	A	298	-19.297	50.950	44.440	1.00107.63	AAAA
ATOM	2298	CA	GLY	A	298	-18.653	51.313	43.194	1.00107.00	AAAA
ATOM	2299	C	GLY	A	298	-17.265	50.706	43.116	1.00106.60	AAAA
ATOM	2300	O	GLY	A	298	-17.101	49.485	43.186	1.00106.62	AAAA
ATOM	2301	N	ALA	A	299	-16.260	51.564	42.981	1.00105.33	AAAA
ATOM	2302	CA	ALA	A	299	-14.881	51.115	42.890	1.00103.71	AAAA
ATOM	2303	CB	ALA	A	299	-14.400	51.219	41.447	1.00103.55	AAAA
ATOM	2304	C	ALA	A	299	-13.990	51.948	43.805	1.00102.61	AAAA
ATOM	2305	O	ALA	A	299	-14.274	53.116	44.065	1.00102.21	AAAA
ATOM	2306	N	ALA	A	300	-12.915	51.341	44.297	1.00101.29	AAAA
ATOM	2307	CA	ALA	A	300	-11.988	52.044	45.173	1.00 99.74	AAAA
ATOM	2308	CB	ALA	A	300	-10.835	51.127	45.569	1.00 99.37	AAAA
ATOM	2309	C	ALA	A	300	-11.462	53.270	44.441	1.00 98.46	AAAA
ATOM	2310	O	ALA	A	300	-10.791	53.155	43.418	1.00 98.09	AAAA
ATOM	2311	N	ALA	A	301	-11.783	54.445	44.964	1.00 97.31	AAAA
ATOM	2312	CA	ALA	A	301	-11.343	55.688	44.357	1.00 96.32	AAAA
ATOM	2313	CB	ALA	A	301	-12.537	56.453	43.804	1.00 95.72	AAAA
ATOM	2314	C	ALA	A	301	-10.618	56.531	45.389	1.00 96.05	AAAA
ATOM	2315	O	ALA	A	301	-10.949	56.496	46.574	1.00 95.28	AAAA
ATOM	2316	N	CYS	A	302	-9.616	57.278	44.935	1.00 96.42	AAAA
ATOM	2317	CA	CYS	A	302	-8.858	58.147	45.825	1.00 96.80	AAAA
ATOM	2318	C	CYS	A	302	-9.711	59.380	46.055	1.00 98.21	AAAA
ATOM	2319	O	CYS	A	302	-10.754	59.548	45.426	1.00 99.06	AAAA
ATOM	2320	CB	CYS	A	302	-7.532	58.579	45.188	1.00 94.62	AAAA

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ATOM	2321	SG	CYS	A	302	-6.387	57.239	44.722	1.00	92.46	AAAA
ATOM	2322	N	SER	A	303	-9.269	60.242	46.958	1.00	99.54	AAAA
ATOM	2323	CA	SER	A	303	-10.001	61.463	47.236	1.00	100.90	AAAA
ATOM	2324	CB	SER	A	303	-11.054	61.216	48.319	1.00	101.51	AAAA
ATOM	2325	OG	SER	A	303	-11.859	62.366	48.527	1.00	103.04	AAAA
ATOM	2326	C	SER	A	303	-9.017	62.541	47.673	1.00	101.55	AAAA
ATOM	2327	O	SER	A	303	-8.297	63.100	46.844	1.00	102.25	AAAA
ATOM	2328	N	LYS	A	304	-8.980	62.820	48.972	1.00	101.77	AAAA
ATOM	2329	CA	LYS	A	304	-8.087	63.837	49.517	1.00	101.56	AAAA
ATOM	2330	CB	LYS	A	304	-8.288	65.162	48.767	1.00	101.20	AAAA
ATOM	2331	CG	LYS	A	304	-7.026	65.991	48.573	1.00	100.59	AAAA
ATOM	2332	CD	LYS	A	304	-7.063	67.265	49.399	1.00	100.68	AAAA
ATOM	2333	CE	LYS	A	304	-5.860	68.145	49.096	1.00	100.67	AAAA
ATOM	2334	NZ	LYS	A	304	-5.848	69.391	49.910	1.00	100.16	AAAA
ATOM	2335	C	LYS	A	304	-8.421	64.008	50.999	1.00	101.57	AAAA
ATOM	2336	O	LYS	A	304	-9.588	63.953	51.390	1.00	101.41	AAAA
ATOM	2337	N	CYS	A	305	-7.397	64.198	51.824	1.00	101.44	AAAA
ATOM	2338	CA	CYS	A	305	-7.613	64.374	53.254	1.00	101.11	AAAA
ATOM	2339	C	CYS	A	305	-8.017	65.808	53.559	1.00	101.70	AAAA
ATOM	2340	O	CYS	A	305	-9.187	66.087	53.821	1.00	102.45	AAAA
ATOM	2341	CB	CYS	A	305	-6.350	64.011	54.046	1.00	99.60	AAAA
ATOM	2342	SG	CYS	A	305	-5.939	62.234	54.074	1.00	96.32	AAAA
ATOM	2343	N	GLY	A	307	-6.746	66.346	55.958	1.00	97.56	AAAA
ATOM	2344	CA	GLY	A	307	-5.446	66.837	56.374	1.00	97.55	AAAA
ATOM	2345	C	GLY	A	307	-4.797	65.906	57.378	1.00	97.42	AAAA
ATOM	2346	O	GLY	A	307	-3.575	65.909	57.544	1.00	97.50	AAAA
ATOM	2347	N	ALA	A	308	-5.625	65.107	58.047	1.00	97.08	AAAA
ATOM	2348	CA	ALA	A	308	-5.152	64.150	59.044	1.00	96.34	AAAA
ATOM	2349	CB	ALA	A	308	-6.271	63.849	60.044	1.00	95.92	AAAA
ATOM	2350	C	ALA	A	308	-4.668	62.851	58.387	1.00	95.56	AAAA
ATOM	2351	O	ALA	A	308	-4.649	61.793	59.024	1.00	96.07	AAAA
ATOM	2352	N	CYS	A	309	-4.279	62.947	57.114	1.00	93.71	AAAA
ATOM	2353	CA	CYS	A	309	-3.786	61.806	56.335	1.00	90.70	AAAA
ATOM	2354	C	CYS	A	309	-2.846	60.898	57.125	1.00	87.47	AAAA
ATOM	2355	O	CYS	A	309	-1.995	61.371	57.877	1.00	86.97	AAAA
ATOM	2356	CB	CYS	A	309	-3.061	62.305	55.075	1.00	92.15	AAAA
ATOM	2357	SG	CYS	A	309	-3.991	62.169	53.509	1.00	94.02	AAAA
ATOM	2358	N	ALA	A	310	-3.010	59.590	56.944	1.00	84.10	AAAA
ATOM	2359	CA	ALA	A	310	-2.173	58.602	57.615	1.00	79.82	AAAA
ATOM	2360	CB	ALA	A	310	-2.863	57.250	57.608	1.00	80.09	AAAA
ATOM	2361	C	ALA	A	310	-0.835	58.514	56.886	1.00	76.93	AAAA
ATOM	2362	O	ALA	A	310	-0.768	58.710	55.671	1.00	76.30	AAAA
ATOM	2363	N	ALA	A	311	0.229	58.221	57.626	1.00	74.09	AAAA
ATOM	2364	CA	ALA	A	311	1.562	58.130	57.037	1.00	71.46	AAAA
ATOM	2365	CB	ALA	A	311	2.618	58.038	58.144	1.00	71.14	AAAA
ATOM	2366	C	ALA	A	311	1.709	56.956	56.058	1.00	69.68	AAAA
ATOM	2367	O	ALA	A	311	1.479	55.796	56.416	1.00	68.07	AAAA
ATOM	2368	N	VAL	A	312	2.090	57.278	54.822	1.00	66.83	AAAA
ATOM	2369	CA	VAL	A	312	2.279	56.283	53.770	1.00	64.46	AAAA
ATOM	2370	CB	VAL	A	312	1.473	56.651	52.492	1.00	63.44	AAAA
ATOM	2371	CG1	VAL	A	312	1.762	55.651	51.386	1.00	61.07	AAAA
ATOM	2372	CG2	VAL	A	312	-0.019	56.685	52.799	1.00	61.63	AAAA
ATOM	2373	C	VAL	A	312	3.758	56.185	53.396	1.00	63.89	AAAA
ATOM	2374	O	VAL	A	312	4.335	57.132	52.855	1.00	64.25	AAAA
ATOM	2375	N	CYS	A	313	4.365	55.035	53.676	1.00	62.37	AAAA
ATOM	2376	CA	CYS	A	313	5.777	54.827	53.371	1.00	60.59	AAAA
ATOM	2377	C	CYS	A	313	5.967	53.918	52.167	1.00	58.86	AAAA
ATOM	2378	O	CYS	A	313	5.184	53.006	51.940	1.00	58.81	AAAA
ATOM	2379	CB	CYS	A	313	6.485	54.234	54.592	1.00	61.02	AAAA
ATOM	2380	SG	CYS	A	313	6.203	55.217	56.101	1.00	62.70	AAAA
ATOM	2381	N	ASN	A	314	7.001	54.180	51.382	1.00	57.78	AAAA
ATOM	2382	CA	ASN	A	314	7.269	53.353	50.219	1.00	58.37	AAAA
ATOM	2383	CB	ASN	A	314	8.335	54.001	49.331	1.00	59.19	AAAA
ATOM	2384	CG	ASN	A	314	7.823	55.243	48.628	1.00	60.57	AAAA
ATOM	2385	OD1	ASN	A	314	6.645	55.322	48.275	1.00	60.81	AAAA
ATOM	2386	ND2	ASN	A	314	8.707	56.213	48.404	1.00	60.24	AAAA
ATOM	2387	C	ASN	A	314	7.724	51.966	50.663	1.00	57.66	AAAA
ATOM	2388	O	ASN	A	314	8.132	51.778	51.806	1.00	56.29	AAAA
ATOM	2389	N	GLY	A	315	7.647	50.996	49.758	1.00	56.44	AAAA
ATOM	2390	CA	GLY	A	315	8.049	49.650	50.108	1.00	55.97	AAAA
ATOM	2391	C	GLY	A	315	9.331	49.234	49.425	1.00	56.05	AAAA
ATOM	2392	O	GLY	A	315	9.775	49.897	48.491	1.00	55.91	AAAA
ATOM	2393	N	ILE	A	316	9.934	48.141	49.889	1.00	55.02	AAAA
ATOM	2394	CA	ILE	A	316	11.165	47.659	49.287	1.00	56.18	AAAA
ATOM	2395	CB	ILE	A	316	11.604	46.319	49.929	1.00	54.77	AAAA

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ATOM	2396	CG2	ILE	A	316	12.488	45.534	48.975	1.00	54.10	AAAA
ATOM	2397	CG1	ILE	A	316	12.378	46.583	51.216	1.00	52.71	AAAA
ATOM	2398	CD1	ILE	A	316	11.637	47.385	52.225	1.00	53.24	AAAA
ATOM	2399	C	ILE	A	316	10.953	47.476	47.782	1.00	57.95	AAAA
ATOM	2400	O	ILE	A	316	9.943	46.925	47.354	1.00	58.12	AAAA
ATOM	2401	N	GLY	A	317	11.893	47.951	46.976	1.00	60.12	AAAA
ATOM	2402	CA	GLY	A	317	11.742	47.799	45.540	1.00	64.05	AAAA
ATOM	2403	C	GLY	A	317	11.601	49.114	44.799	1.00	67.19	AAAA
ATOM	2404	O	GLY	A	317	12.068	49.239	43.669	1.00	67.45	AAAA
ATOM	2405	N	ILE	A	318	10.950	50.092	45.426	1.00	70.08	AAAA
ATOM	2406	CA	ILE	A	318	10.767	51.413	44.822	1.00	73.11	AAAA
ATOM	2407	CB	ILE	A	318	9.273	51.722	44.517	1.00	73.09	AAAA
ATOM	2408	CG2	ILE	A	318	8.724	50.712	43.533	1.00	72.90	AAAA
ATOM	2409	CG1	ILE	A	318	8.461	51.725	45.812	1.00	73.43	AAAA
ATOM	2410	CD1	ILE	A	318	7.000	52.056	45.617	1.00	75.30	AAAA
ATOM	2411	C	ILE	A	318	11.290	52.495	45.764	1.00	74.48	AAAA
ATOM	2412	O	ILE	A	318	11.839	52.189	46.825	1.00	73.82	AAAA
ATOM	2413	N	GLY	A	319	11.107	53.755	45.368	1.00	75.85	AAAA
ATOM	2414	CA	GLY	A	319	11.562	54.871	46.179	1.00	77.46	AAAA
ATOM	2415	C	GLY	A	319	13.036	54.783	46.526	1.00	79.06	AAAA
ATOM	2416	O	GLY	A	319	13.853	54.329	45.717	1.00	78.83	AAAA
ATOM	2417	N	GLU	A	320	13.380	55.215	47.737	1.00	80.00	AAAA
ATOM	2418	CA	GLU	A	320	14.764	55.178	48.193	1.00	81.25	AAAA
ATOM	2419	CB	GLU	A	320	14.917	55.975	49.498	1.00	82.16	AAAA
ATOM	2420	CG	GLU	A	320	13.727	55.897	50.454	1.00	84.19	AAAA
ATOM	2421	CD	GLU	A	320	13.860	56.845	51.649	1.00	85.60	AAAA
ATOM	2422	OE1	GLU	A	320	12.850	57.065	52.359	1.00	86.12	AAAA
ATOM	2423	OE2	GLU	A	320	14.971	57.369	51.884	1.00	84.53	AAAA
ATOM	2424	C	GLU	A	320	15.314	53.762	48.382	1.00	81.33	AAAA
ATOM	2425	O	GLU	A	320	16.475	53.593	48.757	1.00	82.58	AAAA
ATOM	2426	N	PHE	A	321	14.496	52.747	48.113	1.00	80.39	AAAA
ATOM	2427	CA	PHE	A	321	14.942	51.365	48.276	1.00	79.12	AAAA
ATOM	2428	CB	PHE	A	321	14.123	50.661	49.361	1.00	80.00	AAAA
ATOM	2429	CG	PHE	A	321	13.685	51.562	50.481	1.00	80.57	AAAA
ATOM	2430	CD1	PHE	A	321	12.570	52.375	50.337	1.00	80.90	AAAA
ATOM	2431	CD2	PHE	A	321	14.374	51.585	51.687	1.00	81.40	AAAA
ATOM	2432	CE1	PHE	A	321	12.143	53.194	51.378	1.00	81.86	AAAA
ATOM	2433	CE2	PHE	A	321	13.954	52.403	52.733	1.00	82.07	AAAA
ATOM	2434	CZ	PHE	A	321	12.837	53.207	52.579	1.00	81.39	AAAA
ATOM	2435	C	PHE	A	321	14.821	50.576	46.979	1.00	77.65	AAAA
ATOM	2436	O	PHE	A	321	14.462	49.401	46.997	1.00	77.17	AAAA
ATOM	2437	N	LYS	A	322	15.130	51.223	45.861	1.00	76.23	AAAA
ATOM	2438	CA	LYS	A	322	15.032	50.592	44.547	1.00	74.80	AAAA
ATOM	2439	CB	LYS	A	322	15.467	51.580	43.451	1.00	78.21	AAAA
ATOM	2440	CG	LYS	A	322	15.267	51.092	42.005	1.00	80.26	AAAA
ATOM	2441	CD	LYS	A	322	13.787	51.027	41.620	1.00	82.91	AAAA
ATOM	2442	CE	LYS	A	322	13.588	50.601	40.160	1.00	83.20	AAAA
ATOM	2443	NZ	LYS	A	322	12.144	50.450	39.792	1.00	82.23	AAAA
ATOM	2444	C	LYS	A	322	15.843	49.306	44.426	1.00	71.70	AAAA
ATOM	2445	O	LYS	A	322	15.361	48.316	43.881	1.00	71.96	AAAA
ATOM	2446	N	ASP	A	323	17.072	49.312	44.920	1.00	67.88	AAAA
ATOM	2447	CA	ASP	A	323	17.891	48.115	44.829	1.00	64.97	AAAA
ATOM	2448	CB	ASP	A	323	19.210	48.409	44.108	1.00	68.57	AAAA
ATOM	2449	CG	ASP	A	323	19.046	48.514	42.598	1.00	71.53	AAAA
ATOM	2450	OD1	ASP	A	323	18.561	47.538	41.982	1.00	72.27	AAAA
ATOM	2451	OD2	ASP	A	323	19.408	49.570	42.029	1.00	72.48	AAAA
ATOM	2452	C	ASP	A	323	18.176	47.536	46.197	1.00	61.44	AAAA
ATOM	2453	O	ASP	A	323	19.268	47.041	46.455	1.00	62.21	AAAA
ATOM	2454	N	SER	A	324	17.186	47.593	47.072	1.00	56.50	AAAA
ATOM	2455	CA	SER	A	324	17.332	47.061	48.413	1.00	52.77	AAAA
ATOM	2456	CB	SER	A	324	16.692	48.014	49.416	1.00	52.66	AAAA
ATOM	2457	OG	SER	A	324	17.201	49.314	49.221	1.00	56.17	AAAA
ATOM	2458	C	SER	A	324	16.652	45.706	48.480	1.00	49.36	AAAA
ATOM	2459	O	SER	A	324	15.456	45.599	48.211	1.00	48.08	AAAA
ATOM	2460	N	LEU	A	325	17.408	44.678	48.849	1.00	44.46	AAAA
ATOM	2461	CA	LEU	A	325	16.862	43.330	48.939	1.00	41.37	AAAA
ATOM	2462	CB	LEU	A	325	17.997	42.308	49.034	1.00	37.68	AAAA
ATOM	2463	CG	LEU	A	325	18.858	42.203	47.784	1.00	37.42	AAAA
ATOM	2464	CD1	LEU	A	325	19.672	40.942	47.859	1.00	36.15	AAAA
ATOM	2465	CD2	LEU	A	325	17.989	42.187	46.543	1.00	36.66	AAAA
ATOM	2466	C	LEU	A	325	15.880	43.045	50.074	1.00	40.04	AAAA
ATOM	2467	O	LEU	A	325	15.041	42.156	49.957	1.00	41.56	AAAA
ATOM	2468	N	SER	A	326	15.962	43.797	51.161	1.00	38.56	AAAA
ATOM	2469	CA	SER	A	326	15.112	43.509	52.303	1.00	36.73	AAAA
ATOM	2470	CB	SER	A	326	15.699	42.279	53.024	1.00	34.71	AAAA

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ATOM	2471	OG	SER	A	326	15.076	42.012	54.264	1.00	30.65	AAAA
ATOM	2472	C	SER	A	326	15.004	44.669	53.283	1.00	37.69	AAAA
ATOM	2473	O	SER	A	326	15.619	45.712	53.104	1.00	35.63	AAAA
ATOM	2474	N	ILE	A	327	14.178	44.489	54.304	1.00	39.43	AAAA
ATOM	2475	CA	ILE	A	327	14.068	45.486	55.340	1.00	41.94	AAAA
ATOM	2476	CB	ILE	A	327	12.976	45.132	56.358	1.00	42.73	AAAA
ATOM	2477	CG2	ILE	A	327	13.070	46.065	57.551	1.00	43.32	AAAA
ATOM	2478	CG1	ILE	A	327	11.593	45.221	55.712	1.00	43.59	AAAA
ATOM	2479	CD1	ILE	A	327	11.135	46.626	55.436	1.00	45.47	AAAA
ATOM	2480	C	ILE	A	327	15.414	45.225	55.996	1.00	44.16	AAAA
ATOM	2481	O	ILE	A	327	15.771	44.063	56.197	1.00	44.45	AAAA
ATOM	2482	N	ASN	A	328	16.182	46.266	56.300	1.00	44.39	AAAA
ATOM	2483	CA	ASN	A	328	17.474	46.034	56.937	1.00	45.42	AAAA
ATOM	2484	CB	ASN	A	328	18.560	45.758	55.875	1.00	45.06	AAAA
ATOM	2485	CG	ASN	A	328	18.921	46.982	55.061	1.00	45.64	AAAA
ATOM	2486	OD1	ASN	A	328	19.135	48.045	55.627	1.00	48.88	AAAA
ATOM	2487	ND2	ASN	A	328	19.001	46.829	53.740	1.00	44.64	AAAA
ATOM	2488	C	ASN	A	328	17.889	47.170	57.878	1.00	45.45	AAAA
ATOM	2489	O	ASN	A	328	17.240	48.221	57.919	1.00	45.92	AAAA
ATOM	2490	N	ALA	A	329	18.956	46.936	58.644	1.00	44.74	AAAA
ATOM	2491	CA	ALA	A	329	19.478	47.909	59.614	1.00	42.67	AAAA
ATOM	2492	CB	ALA	A	329	20.874	47.510	60.041	1.00	40.78	AAAA
ATOM	2493	C	ALA	A	329	19.495	49.329	59.070	1.00	42.13	AAAA
ATOM	2494	O	ALA	A	329	19.075	50.273	59.739	1.00	42.60	AAAA
ATOM	2495	N	THR	A	330	19.971	49.481	57.845	1.00	40.97	AAAA
ATOM	2496	CA	THR	A	330	20.027	50.791	57.246	1.00	40.78	AAAA
ATOM	2497	CB	THR	A	330	20.703	50.744	55.894	1.00	39.81	AAAA
ATOM	2498	OG1	THR	A	330	22.001	50.150	56.020	1.00	38.87	AAAA
ATOM	2499	CG2	THR	A	330	20.840	52.134	55.344	1.00	41.97	AAAA
ATOM	2500	C	THR	A	330	18.656	51.417	57.053	1.00	43.88	AAAA
ATOM	2501	O	THR	A	330	18.386	52.502	57.567	1.00	45.93	AAAA
ATOM	2502	N	ASN	A	331	17.773	50.729	56.333	1.00	45.61	AAAA
ATOM	2503	CA	ASN	A	331	16.449	51.282	56.035	1.00	45.35	AAAA
ATOM	2504	CB	ASN	A	331	15.941	50.711	54.700	1.00	45.20	AAAA
ATOM	2505	CG	ASN	A	331	15.752	49.194	54.734	1.00	45.50	AAAA
ATOM	2506	OD1	ASN	A	331	14.986	48.666	55.547	1.00	42.11	AAAA
ATOM	2507	ND2	ASN	A	331	16.449	48.489	53.839	1.00	43.65	AAAA
ATOM	2508	C	ASN	A	331	15.331	51.175	57.067	1.00	45.12	AAAA
ATOM	2509	O	ASN	A	331	14.369	51.947	57.018	1.00	43.33	AAAA
ATOM	2510	N	ILE	A	332	15.437	50.262	58.019	1.00	46.12	AAAA
ATOM	2511	CA	ILE	A	332	14.330	50.125	58.952	1.00	49.25	AAAA
ATOM	2512	CB	ILE	A	332	14.579	49.015	59.989	1.00	49.48	AAAA
ATOM	2513	CG2	ILE	A	332	15.683	49.424	60.945	1.00	48.80	AAAA
ATOM	2514	CG1	ILE	A	332	13.268	48.719	60.724	1.00	48.50	AAAA
ATOM	2515	CD1	ILE	A	332	13.228	47.387	61.386	1.00	49.06	AAAA
ATOM	2516	C	ILE	A	332	13.946	51.400	59.671	1.00	52.51	AAAA
ATOM	2517	O	ILE	A	332	12.876	51.478	60.277	1.00	53.83	AAAA
ATOM	2518	N	LYS	A	333	14.810	52.408	59.603	1.00	56.43	AAAA
ATOM	2519	CA	LYS	A	333	14.520	53.670	60.263	1.00	56.96	AAAA
ATOM	2520	CB	LYS	A	333	15.786	54.540	60.379	1.00	59.75	AAAA
ATOM	2521	CG	LYS	A	333	16.371	55.075	59.068	1.00	62.92	AAAA
ATOM	2522	CD	LYS	A	333	17.455	56.133	59.347	1.00	64.32	AAAA
ATOM	2523	CE	LYS	A	333	17.871	56.917	58.093	1.00	64.71	AAAA
ATOM	2524	NZ	LYS	A	333	18.767	56.154	57.170	1.00	64.88	AAAA
ATOM	2525	C	LYS	A	333	13.431	54.413	59.507	1.00	56.90	AAAA
ATOM	2526	O	LYS	A	333	12.530	54.985	60.114	1.00	55.22	AAAA
ATOM	2527	N	HIS	A	334	13.489	54.376	58.180	1.00	58.03	AAAA
ATOM	2528	CA	HIS	A	334	12.496	55.082	57.392	1.00	59.93	AAAA
ATOM	2529	CB	HIS	A	334	12.899	55.108	55.921	1.00	60.73	AAAA
ATOM	2530	CG	HIS	A	334	13.377	56.453	55.463	1.00	64.02	AAAA
ATOM	2531	CD2	HIS	A	334	14.558	56.849	54.933	1.00	64.55	AAAA
ATOM	2532	ND1	HIS	A	334	12.599	57.590	55.554	1.00	64.30	AAAA
ATOM	2533	CE1	HIS	A	334	13.280	58.626	55.101	1.00	63.92	AAAA
ATOM	2534	NE2	HIS	A	334	14.472	58.204	54.718	1.00	64.97	AAAA
ATOM	2535	C	HIS	A	334	11.060	54.599	57.543	1.00	61.09	AAAA
ATOM	2536	O	HIS	A	334	10.122	55.367	57.343	1.00	62.25	AAAA
ATOM	2537	N	PHE	A	335	10.861	53.341	57.904	1.00	62.27	AAAA
ATOM	2538	CA	PHE	A	335	9.497	52.869	58.082	1.00	64.00	AAAA
ATOM	2539	CB	PHE	A	335	9.436	51.345	57.990	1.00	63.38	AAAA
ATOM	2540	CG	PHE	A	335	9.873	50.820	56.666	1.00	61.19	AAAA
ATOM	2541	CD1	PHE	A	335	11.222	50.734	56.351	1.00	61.60	AAAA
ATOM	2542	CD2	PHE	A	335	8.941	50.471	55.705	1.00	61.47	AAAA
ATOM	2543	CE1	PHE	A	335	11.635	50.310	55.092	1.00	60.99	AAAA
ATOM	2544	CE2	PHE	A	335	9.346	50.046	54.445	1.00	60.60	AAAA
ATOM	2545	CZ	PHE	A	335	10.694	49.967	54.139	1.00	59.61	AAAA

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ATOM	2546	C	PHE	A	335	9.041	53.368	59.443	1.00	65.97	AAAA
ATOM	2547	O	PHE	A	335	8.180	52.782	60.099	1.00	67.11	AAAA
ATOM	2548	N	LYS	A	336	9.653	54.483	59.831	1.00	67.69	AAAA
ATOM	2549	CA	LYS	A	336	9.419	55.200	61.082	1.00	67.79	AAAA
ATOM	2550	CB	LYS	A	336	9.392	56.711	60.782	1.00	71.31	AAAA
ATOM	2551	CG	LYS	A	336	8.296	57.142	59.800	1.00	73.33	AAAA
ATOM	2552	CD	LYS	A	336	8.427	58.604	59.351	1.00	76.96	AAAA
ATOM	2553	CE	LYS	A	336	8.259	59.615	60.492	1.00	78.02	AAAA
ATOM	2554	NZ	LYS	A	336	9.462	59.736	61.374	1.00	79.02	AAAA
ATOM	2555	C	LYS	A	336	8.203	54.842	61.933	1.00	65.38	AAAA
ATOM	2556	O	LYS	A	336	8.337	54.213	62.978	1.00	65.38	AAAA
ATOM	2557	N	ASN	A	337	7.024	55.257	61.481	1.00	63.32	AAAA
ATOM	2558	CA	ASN	A	337	5.778	55.047	62.214	1.00	62.21	AAAA
ATOM	2559	CB	ASN	A	337	5.543	56.267	63.116	1.00	65.65	AAAA
ATOM	2560	CG	ASN	A	337	4.519	56.019	64.203	1.00	69.14	AAAA
ATOM	2561	OD1	ASN	A	337	4.755	55.234	65.126	1.00	71.04	AAAA
ATOM	2562	ND2	ASN	A	337	3.373	56.695	64.107	1.00	70.06	AAAA
ATOM	2563	C	ASN	A	337	4.669	54.947	61.169	1.00	60.61	AAAA
ATOM	2564	O	ASN	A	337	3.614	55.577	61.290	1.00	60.03	AAAA
ATOM	2565	N	CYS	A	338	4.930	54.153	60.136	1.00	58.76	AAAA
ATOM	2566	CA	CYS	A	338	4.005	53.955	59.026	1.00	55.22	AAAA
ATOM	2567	C	CYS	A	338	2.760	53.157	59.358	1.00	52.01	AAAA
ATOM	2568	O	CYS	A	338	2.785	52.246	60.176	1.00	50.20	AAAA
ATOM	2569	CB	CYS	A	338	4.736	53.262	57.889	1.00	57.39	AAAA
ATOM	2570	SG	CYS	A	338	6.414	53.917	57.642	1.00	62.46	AAAA
ATOM	2571	N	THR	A	339	1.659	53.508	58.710	1.00	49.96	AAAA
ATOM	2572	CA	THR	A	339	0.408	52.797	58.920	1.00	48.07	AAAA
ATOM	2573	CB	THR	A	339	-0.763	53.768	59.194	1.00	48.20	AAAA
ATOM	2574	OG1	THR	A	339	-0.783	54.788	58.191	1.00	48.76	AAAA
ATOM	2575	CG2	THR	A	339	-0.621	54.405	60.559	1.00	49.44	AAAA
ATOM	2576	C	THR	A	339	0.088	51.991	57.670	1.00	45.32	AAAA
ATOM	2577	O	THR	A	339	-0.602	50.984	57.724	1.00	44.84	AAAA
ATOM	2578	N	SER	A	340	0.630	52.431	56.546	1.00	44.28	AAAA
ATOM	2579	CA	SER	A	340	0.374	51.786	55.273	1.00	44.61	AAAA
ATOM	2580	CB	SER	A	340	-0.755	52.518	54.547	1.00	45.24	AAAA
ATOM	2581	OG	SER	A	340	-0.560	52.469	53.149	1.00	46.61	AAAA
ATOM	2582	C	SER	A	340	1.600	51.782	54.392	1.00	44.36	AAAA
ATOM	2583	O	SER	A	340	2.301	52.789	54.292	1.00	46.75	AAAA
ATOM	2584	N	ILE	A	341	1.850	50.652	53.738	1.00	42.01	AAAA
ATOM	2585	CA	ILE	A	341	2.994	50.544	52.851	1.00	40.41	AAAA
ATOM	2586	CB	ILE	A	341	3.756	49.216	53.065	1.00	37.80	AAAA
ATOM	2587	CG2	ILE	A	341	4.968	49.165	52.173	1.00	34.26	AAAA
ATOM	2588	CG1	ILE	A	341	4.193	49.083	54.521	1.00	39.51	AAAA
ATOM	2589	CD1	ILE	A	341	5.263	50.051	54.933	1.00	41.06	AAAA
ATOM	2590	C	ILE	A	341	2.524	50.593	51.401	1.00	41.08	AAAA
ATOM	2591	O	ILE	A	341	1.682	49.800	50.992	1.00	43.10	AAAA
ATOM	2592	N	SER	A	342	3.043	51.537	50.628	1.00	40.94	AAAA
ATOM	2593	CA	SER	A	342	2.684	51.605	49.221	1.00	41.01	AAAA
ATOM	2594	CB	SER	A	342	2.682	53.040	48.696	1.00	41.60	AAAA
ATOM	2595	OG	SER	A	342	1.492	53.697	49.098	1.00	49.05	AAAA
ATOM	2596	C	SER	A	342	3.757	50.804	48.539	1.00	38.90	AAAA
ATOM	2597	O	SER	A	342	4.822	51.322	48.200	1.00	40.62	AAAA
ATOM	2598	N	GLY	A	343	3.475	49.522	48.368	1.00	36.28	AAAA
ATOM	2599	CA	GLY	A	343	4.433	48.640	47.750	1.00	34.11	AAAA
ATOM	2600	C	GLY	A	343	4.534	47.364	48.551	1.00	34.36	AAAA
ATOM	2601	O	GLY	A	343	3.590	46.966	49.223	1.00	33.26	AAAA
ATOM	2602	N	ASP	A	344	5.701	46.743	48.524	1.00	34.49	AAAA
ATOM	2603	CA	ASP	A	344	5.863	45.476	49.203	1.00	35.59	AAAA
ATOM	2604	CB	ASP	A	344	6.245	44.424	48.162	1.00	34.97	AAAA
ATOM	2605	CG	ASP	A	344	5.631	44.710	46.810	1.00	35.02	AAAA
ATOM	2606	OD1	ASP	A	344	6.381	44.982	45.848	1.00	31.97	AAAA
ATOM	2607	OD2	ASP	A	344	4.387	44.677	46.725	1.00	34.28	AAAA
ATOM	2608	C	ASP	A	344	6.884	45.451	50.319	1.00	35.60	AAAA
ATOM	2609	O	ASP	A	344	7.761	46.302	50.397	1.00	38.91	AAAA
ATOM	2610	N	LEU	A	345	6.767	44.446	51.174	1.00	33.46	AAAA
ATOM	2611	CA	LEU	A	345	7.715	44.262	52.239	1.00	32.32	AAAA
ATOM	2612	CB	LEU	A	345	7.018	44.312	53.592	1.00	33.49	AAAA
ATOM	2613	CG	LEU	A	345	6.672	45.730	54.047	1.00	33.24	AAAA
ATOM	2614	CD1	LEU	A	345	6.249	45.719	55.505	1.00	31.24	AAAA
ATOM	2615	CD2	LEU	A	345	7.897	46.617	53.856	1.00	33.92	AAAA
ATOM	2616	C	LEU	A	345	8.453	42.941	52.095	1.00	32.49	AAAA
ATOM	2617	O	LEU	A	345	7.844	41.876	52.020	1.00	35.05	AAAA
ATOM	2618	N	HIS	A	346	9.772	43.013	52.019	1.00	29.99	AAAA
ATOM	2619	CA	HIS	A	346	10.582	41.809	51.947	1.00	29.38	AAAA
ATOM	2620	CB	HIS	A	346	11.564	41.840	50.781	1.00	28.89	AAAA

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ATOM	2621	CG	HIS	A	346	10.937	42.083	49.450	1.00	32.29	AAAA
ATOM	2622	CD2	HIS	A	346	9.970	42.946	49.060	1.00	33.49	AAAA
ATOM	2623	ND1	HIS	A	346	11.366	41.442	48.306	1.00	30.10	AAAA
ATOM	2624	CE1	HIS	A	346	10.691	41.904	47.270	1.00	29.80	AAAA
ATOM	2625	NE2	HIS	A	346	9.839	42.818	47.699	1.00	31.09	AAAA
ATOM	2626	C	HIS	A	346	11.419	41.718	53.224	1.00	27.99	AAAA
ATOM	2627	O	HIS	A	346	11.975	42.702	53.688	1.00	27.37	AAAA
ATOM	2628	N	ILE	A	347	11.510	40.530	53.785	1.00	27.84	AAAA
ATOM	2629	CA	ILE	A	347	12.330	40.305	54.954	1.00	27.27	AAAA
ATOM	2630	CB	ILE	A	347	11.476	40.161	56.220	1.00	27.42	AAAA
ATOM	2631	CG2	ILE	A	347	12.360	39.847	57.421	1.00	25.35	AAAA
ATOM	2632	CG1	ILE	A	347	10.726	41.464	56.471	1.00	24.20	AAAA
ATOM	2633	CD1	ILE	A	347	9.633	41.346	57.477	1.00	26.96	AAAA
ATOM	2634	C	ILE	A	347	13.090	39.017	54.676	1.00	27.66	AAAA
ATOM	2635	O	ILE	A	347	12.556	37.928	54.845	1.00	28.43	AAAA
ATOM	2636	N	LEU	A	348	14.326	39.149	54.208	1.00	28.39	AAAA
ATOM	2637	CA	LEU	A	348	15.163	37.992	53.903	1.00	29.27	AAAA
ATOM	2638	CB	LEU	A	348	15.856	38.193	52.561	1.00	28.21	AAAA
ATOM	2639	CG	LEU	A	348	14.996	38.654	51.393	1.00	25.65	AAAA
ATOM	2640	CD1	LEU	A	348	15.819	38.645	50.120	1.00	24.40	AAAA
ATOM	2641	CD2	LEU	A	348	13.798	37.731	51.268	1.00	28.01	AAAA
ATOM	2642	C	LEU	A	348	16.226	37.740	54.978	1.00	32.35	AAAA
ATOM	2643	O	LEU	A	348	16.521	38.612	55.801	1.00	32.34	AAAA
ATOM	2644	N	PRO	A	349	16.822	36.538	54.983	1.00	34.16	AAAA
ATOM	2645	CD	PRO	A	349	16.666	35.428	54.031	1.00	35.80	AAAA
ATOM	2646	CA	PRO	A	349	17.850	36.220	55.977	1.00	37.07	AAAA
ATOM	2647	CB	PRO	A	349	18.287	34.802	55.582	1.00	37.04	AAAA
ATOM	2648	CG	PRO	A	349	18.001	34.731	54.139	1.00	36.65	AAAA
ATOM	2649	C	PRO	A	349	19.015	37.222	56.023	1.00	38.67	AAAA
ATOM	2650	O	PRO	A	349	19.639	37.406	57.063	1.00	40.39	AAAA
ATOM	2651	N	VAL	A	350	19.286	37.879	54.901	1.00	39.75	AAAA
ATOM	2652	CA	VAL	A	350	20.364	38.856	54.828	1.00	39.94	AAAA
ATOM	2653	CB	VAL	A	350	20.490	39.487	53.385	1.00	42.49	AAAA
ATOM	2654	CG1	VAL	A	350	19.175	40.184	52.976	1.00	39.36	AAAA
ATOM	2655	CG2	VAL	A	350	21.671	40.470	53.339	1.00	38.55	AAAA
ATOM	2656	C	VAL	A	350	20.157	39.964	55.842	1.00	40.06	AAAA
ATOM	2657	O	VAL	A	350	21.106	40.438	56.435	1.00	42.05	AAAA
ATOM	2658	N	ALA	A	351	18.914	40.371	56.045	1.00	39.22	AAAA
ATOM	2659	CA	ALA	A	351	18.620	41.427	57.001	1.00	40.03	AAAA
ATOM	2660	CB	ALA	A	351	17.126	41.605	57.121	1.00	36.83	AAAA
ATOM	2661	C	ALA	A	351	19.221	41.163	58.394	1.00	41.77	AAAA
ATOM	2662	O	ALA	A	351	19.630	42.094	59.090	1.00	42.11	AAAA
ATOM	2663	N	PHE	A	352	19.282	39.899	58.798	1.00	42.85	AAAA
ATOM	2664	CA	PHE	A	352	19.804	39.570	60.113	1.00	42.01	AAAA
ATOM	2665	CB	PHE	A	352	19.005	38.412	60.716	1.00	39.56	AAAA
ATOM	2666	CG	PHE	A	352	17.524	38.678	60.768	1.00	38.94	AAAA
ATOM	2667	CD1	PHE	A	352	16.676	38.181	59.777	1.00	38.43	AAAA
ATOM	2668	CD2	PHE	A	352	16.990	39.497	61.747	1.00	35.12	AAAA
ATOM	2669	CE1	PHE	A	352	15.321	38.503	59.763	1.00	36.32	AAAA
ATOM	2670	CE2	PHE	A	352	15.639	39.824	61.738	1.00	37.65	AAAA
ATOM	2671	CZ	PHE	A	352	14.804	39.326	60.742	1.00	37.58	AAAA
ATOM	2672	C	PHE	A	352	21.294	39.270	60.142	1.00	43.28	AAAA
ATOM	2673	O	PHE	A	352	21.932	39.432	61.179	1.00	44.71	AAAA
ATOM	2674	N	ARG	A	353	21.852	38.856	59.011	1.00	42.78	AAAA
ATOM	2675	CA	ARG	A	353	23.277	38.556	58.935	1.00	43.53	AAAA
ATOM	2676	CB	ARG	A	353	23.560	37.514	57.852	1.00	44.64	AAAA
ATOM	2677	CG	ARG	A	353	23.098	36.104	58.191	1.00	50.48	AAAA
ATOM	2678	CD	ARG	A	353	23.567	35.099	57.151	0.01	50.59	AAAA
ATOM	2679	NE	ARG	A	353	23.424	33.722	57.617	0.01	52.43	AAAA
ATOM	2680	CZ	ARG	A	353	24.076	33.214	58.659	0.01	53.05	AAAA
ATOM	2681	NH1	ARG	A	353	24.921	33.969	59.349	0.01	53.57	AAAA
ATOM	2682	NH2	ARG	A	353	23.886	31.950	59.011	0.01	53.57	AAAA
ATOM	2683	C	ARG	A	353	24.078	39.805	58.607	1.00	43.97	AAAA
ATOM	2684	O	ARG	A	353	25.260	39.893	58.925	1.00	44.34	AAAA
ATOM	2685	N	GLY	A	354	23.416	40.779	57.993	1.00	43.06	AAAA
ATOM	2686	CA	GLY	A	354	24.096	41.981	57.564	1.00	41.24	AAAA
ATOM	2687	C	GLY	A	354	24.672	41.593	56.215	1.00	41.66	AAAA
ATOM	2688	O	GLY	A	354	24.808	40.413	55.924	1.00	42.24	AAAA
ATOM	2689	N	ASP	A	355	25.012	42.557	55.378	1.00	43.30	AAAA
ATOM	2690	CA	ASP	A	355	25.563	42.219	54.078	1.00	45.56	AAAA
ATOM	2691	CB	ASP	A	355	24.478	42.356	53.013	1.00	44.44	AAAA
ATOM	2692	CG	ASP	A	355	24.975	42.012	51.634	1.00	44.27	AAAA
ATOM	2693	OD1	ASP	A	355	25.553	40.912	51.465	1.00	43.68	AAAA
ATOM	2694	OD2	ASP	A	355	24.780	42.840	50.722	1.00	44.02	AAAA
ATOM	2695	C	ASP	A	355	26.764	43.085	53.706	1.00	48.15	AAAA

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ATOM	2696	O	ASP	A	355	26.643	44.302	53.595	1.00	48.77	AAAA
ATOM	2697	N	SER	A	356	27.916	42.449	53.499	1.00	49.79	AAAA
ATOM	2698	CA	SER	A	356	29.137	43.165	53.137	1.00	51.19	AAAA
ATOM	2699	CB	SER	A	356	30.328	42.205	53.060	1.00	51.92	AAAA
ATOM	2700	OG	SER	A	356	30.234	41.350	51.933	0.01	51.18	AAAA
ATOM	2701	C	SER	A	356	29.028	43.895	51.806	1.00	52.03	AAAA
ATOM	2702	O	SER	A	356	29.094	45.119	51.758	1.00	53.64	AAAA
ATOM	2703	N	PHE	A	357	28.867	43.128	50.732	1.00	52.39	AAAA
ATOM	2704	CA	PHE	A	357	28.774	43.659	49.373	1.00	50.80	AAAA
ATOM	2705	CB	PHE	A	357	28.286	42.571	48.426	1.00	49.93	AAAA
ATOM	2706	CG	PHE	A	357	29.193	41.379	48.363	1.00	48.68	AAAA
ATOM	2707	CD1	PHE	A	357	30.194	41.302	47.401	1.00	48.16	AAAA
ATOM	2708	CD2	PHE	A	357	29.064	40.343	49.286	1.00	47.45	AAAA
ATOM	2709	CE1	PHE	A	357	31.059	40.203	47.357	1.00	48.62	AAAA
ATOM	2710	CE2	PHE	A	357	29.920	39.246	49.254	1.00	47.15	AAAA
ATOM	2711	CZ	PHE	A	357	30.918	39.174	48.289	1.00	48.58	AAAA
ATOM	2712	C	PHE	A	357	27.869	44.854	49.238	1.00	50.49	AAAA
ATOM	2713	O	PHE	A	357	27.931	45.569	48.240	1.00	51.56	AAAA
ATOM	2714	N	THR	A	358	27.042	45.081	50.251	1.00	50.56	AAAA
ATOM	2715	CA	THR	A	358	26.096	46.178	50.215	1.00	49.80	AAAA
ATOM	2716	CB	THR	A	358	24.665	45.599	50.146	1.00	50.48	AAAA
ATOM	2717	OG1	THR	A	358	23.849	46.427	49.308	1.00	51.68	AAAA
ATOM	2718	CG2	THR	A	358	24.055	45.489	51.542	1.00	50.09	AAAA
ATOM	2719	C	THR	A	358	26.234	47.153	51.389	1.00	49.88	AAAA
ATOM	2720	O	THR	A	358	25.441	48.092	51.516	1.00	49.44	AAAA
ATOM	2721	N	HIS	A	359	27.242	46.921	52.235	1.00	50.83	AAAA
ATOM	2722	CA	HIS	A	359	27.538	47.760	53.406	1.00	51.50	AAAA
ATOM	2723	CB	HIS	A	359	27.940	49.161	52.961	1.00	55.37	AAAA
ATOM	2724	CG	HIS	A	359	29.125	49.183	52.052	1.00	59.82	AAAA
ATOM	2725	CD2	HIS	A	359	30.355	48.630	52.178	1.00	62.01	AAAA
ATOM	2726	ND1	HIS	A	359	29.116	49.829	50.834	1.00	61.00	AAAA
ATOM	2727	CE1	HIS	A	359	30.291	49.673	50.249	1.00	64.63	AAAA
ATOM	2728	NE2	HIS	A	359	31.060	48.949	51.044	1.00	65.51	AAAA
ATOM	2729	C	HIS	A	359	26.397	47.882	54.397	1.00	51.39	AAAA
ATOM	2730	O	HIS	A	359	26.082	48.981	54.862	1.00	51.24	AAAA
ATOM	2731	N	THR	A	360	25.783	46.755	54.734	1.00	50.38	AAAA
ATOM	2732	CA	THR	A	360	24.672	46.762	55.661	1.00	49.62	AAAA
ATOM	2733	CB	THR	A	360	23.374	46.278	54.966	1.00	48.68	AAAA
ATOM	2734	OG1	THR	A	360	23.104	47.112	53.837	1.00	46.59	AAAA
ATOM	2735	CG2	THR	A	360	22.183	46.358	55.919	1.00	50.02	AAAA
ATOM	2736	C	THR	A	360	25.001	45.858	56.836	1.00	49.92	AAAA
ATOM	2737	O	THR	A	360	25.399	44.715	56.650	1.00	51.23	AAAA
ATOM	2738	N	PRO	A	361	24.869	46.377	58.066	1.00	49.72	AAAA
ATOM	2739	CD	PRO	A	361	24.733	47.814	58.382	1.00	49.73	AAAA
ATOM	2740	CA	PRO	A	361	25.154	45.603	59.276	1.00	49.05	AAAA
ATOM	2741	CB	PRO	A	361	25.575	46.676	60.265	1.00	49.54	AAAA
ATOM	2742	CG	PRO	A	361	24.678	47.821	59.894	1.00	49.15	AAAA
ATOM	2743	C	PRO	A	361	23.918	44.860	59.747	1.00	50.01	AAAA
ATOM	2744	O	PRO	A	361	22.799	45.229	59.399	1.00	50.60	AAAA
ATOM	2745	N	PRO	A	362	24.097	43.813	60.562	1.00	50.77	AAAA
ATOM	2746	CD	PRO	A	362	25.332	43.293	61.175	1.00	50.01	AAAA
ATOM	2747	CA	PRO	A	362	22.932	43.070	61.040	1.00	51.10	AAAA
ATOM	2748	CB	PRO	A	362	23.505	42.238	62.179	1.00	49.45	AAAA
ATOM	2749	CG	PRO	A	362	24.882	41.952	61.712	1.00	49.56	AAAA
ATOM	2750	C	PRO	A	362	21.827	44.011	61.513	1.00	52.33	AAAA
ATOM	2751	O	PRO	A	362	22.078	45.179	61.805	1.00	52.63	AAAA
ATOM	2752	N	LEU	A	363	20.606	43.492	61.568	1.00	52.86	AAAA
ATOM	2753	CA	LEU	A	363	19.453	44.252	62.019	1.00	52.54	AAAA
ATOM	2754	CB	LEU	A	363	18.258	43.999	61.101	1.00	51.57	AAAA
ATOM	2755	CG	LEU	A	363	16.915	44.587	61.523	1.00	50.20	AAAA
ATOM	2756	CD1	LEU	A	363	16.913	46.069	61.219	1.00	50.68	AAAA
ATOM	2757	CD2	LEU	A	363	15.775	43.889	60.791	1.00	48.63	AAAA
ATOM	2758	C	LEU	A	363	19.149	43.718	63.404	1.00	54.65	AAAA
ATOM	2759	O	LEU	A	363	19.158	42.510	63.622	1.00	57.22	AAAA
ATOM	2760	N	ASP	A	364	18.896	44.605	64.351	1.00	56.01	AAAA
ATOM	2761	CA	ASP	A	364	18.600	44.164	65.698	1.00	56.55	AAAA
ATOM	2762	CB	ASP	A	364	18.763	45.322	66.686	1.00	60.61	AAAA
ATOM	2763	CG	ASP	A	364	18.680	44.869	68.130	1.00	63.59	AAAA
ATOM	2764	OD1	ASP	A	364	17.574	44.499	68.588	1.00	63.94	AAAA
ATOM	2765	OD2	ASP	A	364	19.732	44.875	68.801	1.00	66.28	AAAA
ATOM	2766	C	ASP	A	364	17.172	43.656	65.712	1.00	55.38	AAAA
ATOM	2767	O	ASP	A	364	16.234	44.404	65.455	1.00	55.75	AAAA
ATOM	2768	N	PRO	A	365	16.989	42.367	66.004	1.00	53.91	AAAA
ATOM	2769	CD	PRO	A	365	17.989	41.347	66.368	1.00	53.55	AAAA
ATOM	2770	CA	PRO	A	365	15.647	41.802	66.035	1.00	53.19	AAAA

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ATOM	2771	CB	PRO A 365	15.845	40.531	66.849	1.00	51.82	AAAA
ATOM	2772	CG	PRO A 365	17.165	40.064	66.367	1.00	50.75	AAAA
ATOM	2773	C	PRO A 365	14.616	42.739	66.645	1.00	53.49	AAAA
ATOM	2774	O	PRO A 365	13.509	42.880	66.127	1.00	53.40	AAAA
ATOM	2775	N	GLN A 366	14.990	43.400	67.734	1.00	53.99	AAAA
ATOM	2776	CA	GLN A 366	14.064	44.296	68.420	1.00	54.39	AAAA
ATOM	2777	CB	GLN A 366	14.738	44.923	69.642	1.00	55.64	AAAA
ATOM	2778	CG	GLN A 366	15.253	43.904	70.652	1.00	58.00	AAAA
ATOM	2779	CD	GLN A 366	15.900	44.556	71.858	0.01	58.01	AAAA
ATOM	2780	OE1	GLN A 366	15.260	45.316	72.585	0.01	58.47	AAAA
ATOM	2781	NE2	GLN A 366	17.176	44.263	72.076	0.01	58.48	AAAA
ATOM	2782	C	GLN A 366	13.535	45.388	67.510	1.00	52.96	AAAA
ATOM	2783	O	GLN A 366	12.428	45.885	67.697	1.00	51.91	AAAA
ATOM	2784	N	GLU A 367	14.329	45.740	66.513	1.00	52.35	AAAA
ATOM	2785	CA	GLU A 367	13.968	46.790	65.577	1.00	52.97	AAAA
ATOM	2786	CB	GLU A 367	15.106	46.989	64.583	1.00	53.99	AAAA
ATOM	2787	CG	GLU A 367	15.246	48.411	64.097	1.00	56.34	AAAA
ATOM	2788	CD	GLU A 367	15.890	49.311	65.122	1.00	54.53	AAAA
ATOM	2789	OE1	GLU A 367	17.056	49.056	65.483	1.00	55.39	AAAA
ATOM	2790	OE2	GLU A 367	15.230	50.268	65.562	1.00	53.72	AAAA
ATOM	2791	C	GLU A 367	12.666	46.532	64.813	1.00	52.61	AAAA
ATOM	2792	O	GLU A 367	11.933	47.467	64.497	1.00	52.41	AAAA
ATOM	2793	N	LEU A 368	12.383	45.268	64.520	1.00	51.52	AAAA
ATOM	2794	CA	LEU A 368	11.184	44.907	63.777	1.00	50.41	AAAA
ATOM	2795	CB	LEU A 368	11.084	43.390	63.641	1.00	47.61	AAAA
ATOM	2796	CG	LEU A 368	12.121	42.696	62.768	1.00	45.79	AAAA
ATOM	2797	CD1	LEU A 368	12.069	41.210	63.028	1.00	44.72	AAAA
ATOM	2798	CD2	LEU A 368	11.867	43.013	61.309	1.00	44.64	AAAA
ATOM	2799	C	LEU A 368	9.899	45.422	64.402	1.00	51.72	AAAA
ATOM	2800	O	LEU A 368	8.895	45.599	63.713	1.00	53.14	AAAA
ATOM	2801	N	ASP A 369	9.916	45.664	65.705	1.00	52.93	AAAA
ATOM	2802	CA	ASP A 369	8.710	46.129	66.371	1.00	53.55	AAAA
ATOM	2803	CB	ASP A 369	8.935	46.196	67.881	1.00	57.03	AAAA
ATOM	2804	CG	ASP A 369	9.127	44.813	68.496	1.00	59.80	AAAA
ATOM	2805	OD1	ASP A 369	8.453	43.858	68.041	1.00	61.33	AAAA
ATOM	2806	OD2	ASP A 369	9.939	44.678	69.434	1.00	61.64	AAAA
ATOM	2807	C	ASP A 369	8.231	47.455	65.817	1.00	52.70	AAAA
ATOM	2808	O	ASP A 369	7.122	47.899	66.094	1.00	52.18	AAAA
ATOM	2809	N	ILE A 370	9.074	48.075	65.006	1.00	52.34	AAAA
ATOM	2810	CA	ILE A 370	8.729	49.333	64.377	1.00	52.45	AAAA
ATOM	2811	CB	ILE A 370	9.890	49.829	63.504	1.00	51.40	AAAA
ATOM	2812	CG2	ILE A 370	9.425	50.958	62.611	1.00	52.86	AAAA
ATOM	2813	CG1	ILE A 370	11.057	50.262	64.391	1.00	52.35	AAAA
ATOM	2814	CD1	ILE A 370	12.249	50.847	63.629	1.00	51.37	AAAA
ATOM	2815	C	ILE A 370	7.493	49.136	63.493	1.00	53.66	AAAA
ATOM	2816	O	ILE A 370	6.616	50.000	63.419	1.00	54.79	AAAA
ATOM	2817	N	LEU A 371	7.429	47.983	62.835	1.00	53.45	AAAA
ATOM	2818	CA	LEU A 371	6.334	47.655	61.934	1.00	52.47	AAAA
ATOM	2819	CB	LEU A 371	6.669	46.360	61.200	1.00	51.56	AAAA
ATOM	2820	CG	LEU A 371	8.017	46.327	60.471	1.00	50.65	AAAA
ATOM	2821	CD1	LEU A 371	8.307	44.921	60.008	1.00	49.90	AAAA
ATOM	2822	CD2	LEU A 371	7.998	47.273	59.285	1.00	51.95	AAAA
ATOM	2823	C	LEU A 371	4.937	47.536	62.547	1.00	52.88	AAAA
ATOM	2824	O	LEU A 371	3.961	47.454	61.808	1.00	54.31	AAAA
ATOM	2825	N	LYS A 372	4.834	47.535	63.876	1.00	53.48	AAAA
ATOM	2826	CA	LYS A 372	3.540	47.400	64.567	1.00	53.15	AAAA
ATOM	2827	CB	LYS A 372	3.726	47.434	66.090	1.00	56.18	AAAA
ATOM	2828	CG	LYS A 372	4.445	46.231	66.709	1.00	60.98	AAAA
ATOM	2829	CD	LYS A 372	4.345	46.278	68.247	1.00	63.27	AAAA
ATOM	2830	CE	LYS A 372	5.035	45.090	68.936	1.00	64.72	AAAA
ATOM	2831	NZ	LYS A 372	4.965	45.151	70.446	1.00	62.26	AAAA
ATOM	2832	C	LYS A 372	2.479	48.438	64.196	1.00	52.63	AAAA
ATOM	2833	O	LYS A 372	1.307	48.290	64.539	1.00	51.81	AAAA
ATOM	2834	N	THR A 373	2.885	49.496	63.511	1.00	52.31	AAAA
ATOM	2835	CA	THR A 373	1.947	50.535	63.110	1.00	52.28	AAAA
ATOM	2836	CB	THR A 373	2.630	51.916	63.106	1.00	52.37	AAAA
ATOM	2837	OG1	THR A 373	3.964	51.785	62.592	1.00	54.63	AAAA
ATOM	2838	CG2	THR A 373	2.674	52.496	64.506	1.00	49.59	AAAA
ATOM	2839	C	THR A 373	1.372	50.262	61.720	1.00	52.65	AAAA
ATOM	2840	O	THR A 373	0.337	50.815	61.351	1.00	54.04	AAAA
ATOM	2841	N	VAL A 374	2.057	49.413	60.956	1.00	51.58	AAAA
ATOM	2842	CA	VAL A 374	1.635	49.049	59.607	1.00	49.40	AAAA
ATOM	2843	CB	VAL A 374	2.665	48.144	58.923	1.00	49.73	AAAA
ATOM	2844	CG1	VAL A 374	2.268	47.915	57.484	1.00	47.14	AAAA
ATOM	2845	CG2	VAL A 374	4.057	48.753	59.033	1.00	49.10	AAAA

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ATOM	2846	C	VAL	A	374	0.318	48.293	59.640	1.00	49.48	AAAA
ATOM	2847	O	VAL	A	374	0.257	47.135	60.063	1.00	48.17	AAAA
ATOM	2848	N	LYS	A	375	-0.740	48.956	59.192	1.00	49.06	AAAA
ATOM	2849	CA	LYS	A	375	-2.050	48.341	59.174	1.00	47.47	AAAA
ATOM	2850	CB	LYS	A	375	-3.095	49.343	59.652	1.00	47.94	AAAA
ATOM	2851	CG	LYS	A	375	-3.064	49.527	61.161	1.00	50.96	AAAA
ATOM	2852	CD	LYS	A	375	-4.238	50.353	61.656	1.00	55.61	AAAA
ATOM	2853	CE	LYS	A	375	-4.481	50.142	63.149	1.00	57.99	AAAA
ATOM	2854	NZ	LYS	A	375	-4.854	48.727	63.455	1.00	59.93	AAAA
ATOM	2855	C	LYS	A	375	-2.423	47.774	57.813	1.00	45.46	AAAA
ATOM	2856	O	LYS	A	375	-3.285	46.901	57.726	1.00	45.09	AAAA
ATOM	2857	N	GLU	A	376	-1.769	48.253	56.755	1.00	43.54	AAAA
ATOM	2858	CA	GLU	A	376	-2.063	47.756	55.419	1.00	42.32	AAAA
ATOM	2859	CB	GLU	A	376	-3.228	48.538	54.784	1.00	45.81	AAAA
ATOM	2860	CG	GLU	A	376	-2.825	49.678	53.826	1.00	50.81	AAAA
ATOM	2861	CD	GLU	A	376	-4.016	50.249	53.051	1.00	52.44	AAAA
ATOM	2862	OE1	GLU	A	376	-4.956	50.756	53.702	1.00	54.15	AAAA
ATOM	2863	OE2	GLU	A	376	-4.014	50.191	51.798	1.00	52.03	AAAA
ATOM	2864	C	GLU	A	376	-0.867	47.790	54.489	1.00	39.02	AAAA
ATOM	2865	O	GLU	A	376	-0.021	48.668	54.586	1.00	38.72	AAAA
ATOM	2866	N	ILE	A	377	-0.817	46.813	53.589	1.00	36.15	AAAA
ATOM	2867	CA	ILE	A	377	0.247	46.690	52.597	1.00	34.67	AAAA
ATOM	2868	CB	ILE	A	377	1.089	45.415	52.845	1.00	33.22	AAAA
ATOM	2869	CG2	ILE	A	377	2.156	45.274	51.767	1.00	30.67	AAAA
ATOM	2870	CG1	ILE	A	377	1.704	45.467	54.249	1.00	31.05	AAAA
ATOM	2871	CD1	ILE	A	377	2.476	44.219	54.656	1.00	27.03	AAAA
ATOM	2872	C	ILE	A	377	-0.408	46.587	51.212	1.00	34.43	AAAA
ATOM	2873	O	ILE	A	377	-1.129	45.625	50.947	1.00	35.00	AAAA
ATOM	2874	N	THR	A	378	-0.157	47.560	50.333	1.00	32.45	AAAA
ATOM	2875	CA	THR	A	378	-0.765	47.534	49.005	1.00	33.19	AAAA
ATOM	2876	CB	THR	A	378	-0.665	48.911	48.300	1.00	33.39	AAAA
ATOM	2877	OG1	THR	A	378	0.701	49.231	48.018	1.00	33.93	AAAA
ATOM	2878	CG2	THR	A	378	-1.262	49.985	49.173	1.00	30.18	AAAA
ATOM	2879	C	THR	A	378	-0.194	46.457	48.083	1.00	34.40	AAAA
ATOM	2880	O	THR	A	378	-0.912	45.882	47.270	1.00	35.39	AAAA
ATOM	2881	N	GLY	A	379	1.098	46.181	48.215	1.00	35.20	AAAA
ATOM	2882	CA	GLY	A	379	1.722	45.160	47.395	1.00	33.28	AAAA
ATOM	2883	C	GLY	A	379	1.634	43.807	48.074	1.00	33.66	AAAA
ATOM	2884	O	GLY	A	379	0.541	43.344	48.372	1.00	32.90	AAAA
ATOM	2885	N	PHE	A	380	2.781	43.177	48.324	1.00	33.30	AAAA
ATOM	2886	CA	PHE	A	380	2.819	41.877	48.981	1.00	31.58	AAAA
ATOM	2887	CB	PHE	A	380	3.160	40.799	47.957	1.00	29.54	AAAA
ATOM	2888	CG	PHE	A	380	4.555	40.903	47.387	1.00	29.03	AAAA
ATOM	2889	CD1	PHE	A	380	5.642	40.330	48.049	1.00	28.62	AAAA
ATOM	2890	CD2	PHE	A	380	4.782	41.532	46.168	1.00	29.50	AAAA
ATOM	2891	CE1	PHE	A	380	6.941	40.372	47.505	1.00	26.20	AAAA
ATOM	2892	CE2	PHE	A	380	6.082	41.581	45.614	1.00	29.64	AAAA
ATOM	2893	CZ	PHE	A	380	7.159	40.995	46.290	1.00	26.34	AAAA
ATOM	2894	C	PHE	A	380	3.810	41.821	50.163	1.00	32.87	AAAA
ATOM	2895	O	PHE	A	380	4.696	42.664	50.298	1.00	32.63	AAAA
ATOM	2896	N	LEU	A	381	3.622	40.826	51.024	1.00	32.07	AAAA
ATOM	2897	CA	LEU	A	381	4.464	40.593	52.190	1.00	30.36	AAAA
ATOM	2898	CB	LEU	A	381	3.591	40.523	53.442	1.00	29.96	AAAA
ATOM	2899	CG	LEU	A	381	4.144	39.943	54.749	1.00	30.63	AAAA
ATOM	2900	CD1	LEU	A	381	5.472	40.586	55.107	1.00	31.13	AAAA
ATOM	2901	CD2	LEU	A	381	3.116	40.176	55.858	1.00	28.83	AAAA
ATOM	2902	C	LEU	A	381	5.206	39.271	51.983	1.00	29.63	AAAA
ATOM	2903	O	LEU	A	381	4.589	38.217	51.919	1.00	30.25	AAAA
ATOM	2904	N	LEU	A	382	6.526	39.338	51.849	1.00	27.52	AAAA
ATOM	2905	CA	LEU	A	382	7.347	38.148	51.640	1.00	26.93	AAAA
ATOM	2906	CB	LEU	A	382	8.148	38.284	50.350	1.00	22.94	AAAA
ATOM	2907	CG	LEU	A	382	9.303	37.305	50.144	1.00	20.87	AAAA
ATOM	2908	CD1	LEU	A	382	8.776	35.892	50.030	1.00	24.10	AAAA
ATOM	2909	CD2	LEU	A	382	10.052	37.664	48.880	1.00	16.01	AAAA
ATOM	2910	C	LEU	A	382	8.313	37.974	52.804	1.00	29.42	AAAA
ATOM	2911	O	LEU	A	382	9.223	38.784	52.990	1.00	28.34	AAAA
ATOM	2912	N	ILE	A	383	8.113	36.919	53.588	1.00	29.60	AAAA
ATOM	2913	CA	ILE	A	383	8.973	36.662	54.730	1.00	28.38	AAAA
ATOM	2914	CB	ILE	A	383	8.163	36.585	56.032	1.00	27.00	AAAA
ATOM	2915	CG2	ILE	A	383	9.108	36.467	57.213	1.00	26.88	AAAA
ATOM	2916	CG1	ILE	A	383	7.308	37.843	56.184	1.00	27.28	AAAA
ATOM	2917	CD1	ILE	A	383	6.306	37.787	57.328	1.00	24.13	AAAA
ATOM	2918	C	ILE	A	383	9.746	35.368	54.574	1.00	28.30	AAAA
ATOM	2919	O	ILE	A	383	9.190	34.290	54.734	1.00	27.86	AAAA
ATOM	2920	N	GLN	A	384	11.037	35.483	54.268	1.00	30.90	AAAA

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ATOM	2921	CA	GLN	A	384	11.898	34.314	54.114	1.00	32.20	AAAA
ATOM	2922	CB	GLN	A	384	12.737	34.423	52.840	1.00	31.91	AAAA
ATOM	2923	CG	GLN	A	384	11.921	34.449	51.570	1.00	31.54	AAAA
ATOM	2924	CD	GLN	A	384	12.779	34.311	50.334	1.00	34.67	AAAA
ATOM	2925	OE1	GLN	A	384	12.329	34.558	49.221	1.00	36.67	AAAA
ATOM	2926	NE2	GLN	A	384	14.021	33.907	50.522	1.00	34.13	AAAA
ATOM	2927	C	GLN	A	384	12.809	34.117	55.331	1.00	32.74	AAAA
ATOM	2928	O	GLN	A	384	13.576	33.153	55.393	1.00	33.81	AAAA
ATOM	2929	N	ALA	A	385	12.703	35.013	56.308	1.00	33.98	AAAA
ATOM	2930	CA	ALA	A	385	13.514	34.918	57.526	1.00	35.51	AAAA
ATOM	2931	CB	ALA	A	385	14.929	35.421	57.252	1.00	34.58	AAAA
ATOM	2932	C	ALA	A	385	12.885	35.700	58.675	1.00	36.69	AAAA
ATOM	2933	O	ALA	A	385	12.213	36.708	58.460	1.00	38.44	AAAA
ATOM	2934	N	TRP	A	386	13.083	35.220	59.897	1.00	37.42	AAAA
ATOM	2935	CA	TRP	A	386	12.541	35.887	61.075	1.00	36.93	AAAA
ATOM	2936	CB	TRP	A	386	11.221	35.251	61.492	1.00	33.19	AAAA
ATOM	2937	CG	TRP	A	386	10.308	36.173	62.260	1.00	31.66	AAAA
ATOM	2938	CD2	TRP	A	386	9.857	37.473	61.850	1.00	30.89	AAAA
ATOM	2939	CE2	TRP	A	386	8.975	37.943	62.839	1.00	29.81	AAAA
ATOM	2940	CE3	TRP	A	386	10.112	38.281	60.737	1.00	31.88	AAAA
ATOM	2941	CD1	TRP	A	386	9.699	35.919	63.454	1.00	31.89	AAAA
ATOM	2942	NE1	TRP	A	386	8.894	36.980	63.810	1.00	31.64	AAAA
ATOM	2943	CZ2	TRP	A	386	8.345	39.185	62.749	1.00	32.35	AAAA
ATOM	2944	CZ3	TRP	A	386	9.485	39.518	60.653	1.00	32.61	AAAA
ATOM	2945	CH2	TRP	A	386	8.613	39.956	61.651	1.00	29.96	AAAA
ATOM	2946	C	TRP	A	386	13.555	35.729	62.199	1.00	40.81	AAAA
ATOM	2947	O	TRP	A	386	14.349	34.794	62.191	1.00	40.29	AAAA
ATOM	2948	N	PRO	A	387	13.555	36.648	63.179	1.00	44.46	AAAA
ATOM	2949	CD	PRO	A	387	12.795	37.898	63.345	1.00	44.75	AAAA
ATOM	2950	CA	PRO	A	387	14.528	36.493	64.260	1.00	47.07	AAAA
ATOM	2951	CB	PRO	A	387	14.150	37.607	65.222	1.00	46.83	AAAA
ATOM	2952	CG	PRO	A	387	13.685	38.674	64.296	1.00	47.11	AAAA
ATOM	2953	C	PRO	A	387	14.429	35.108	64.884	1.00	49.67	AAAA
ATOM	2954	O	PRO	A	387	13.345	34.626	65.211	1.00	48.87	AAAA
ATOM	2955	N	GLU	A	388	15.590	34.486	65.027	1.00	53.59	AAAA
ATOM	2956	CA	GLU	A	388	15.745	33.147	65.571	1.00	57.22	AAAA
ATOM	2957	CB	GLU	A	388	17.225	32.923	65.921	1.00	59.80	AAAA
ATOM	2958	CG	GLU	A	388	18.196	32.910	64.718	1.00	62.49	AAAA
ATOM	2959	CD	GLU	A	388	18.372	34.269	64.008	1.00	65.03	AAAA
ATOM	2960	OE1	GLU	A	388	19.161	34.318	63.037	1.00	66.51	AAAA
ATOM	2961	OE2	GLU	A	388	17.744	35.282	64.399	1.00	65.04	AAAA
ATOM	2962	C	GLU	A	388	14.862	32.770	66.768	1.00	58.89	AAAA
ATOM	2963	O	GLU	A	388	14.222	31.708	66.757	1.00	59.31	AAAA
ATOM	2964	N	ASN	A	389	14.818	33.617	67.795	1.00	59.06	AAAA
ATOM	2965	CA	ASN	A	389	14.016	33.296	68.976	1.00	59.08	AAAA
ATOM	2966	CB	ASN	A	389	14.813	33.549	70.261	1.00	60.84	AAAA
ATOM	2967	CG	ASN	A	389	15.884	32.497	70.500	1.00	63.48	AAAA
ATOM	2968	OD1	ASN	A	389	15.634	31.293	70.356	1.00	63.01	AAAA
ATOM	2969	ND2	ASN	A	389	17.081	32.943	70.879	1.00	63.98	AAAA
ATOM	2970	C	ASN	A	389	12.659	33.967	69.105	1.00	57.96	AAAA
ATOM	2971	O	ASN	A	389	12.236	34.297	70.209	1.00	57.66	AAAA
ATOM	2972	N	ARG	A	390	11.980	34.185	67.986	1.00	56.49	AAAA
ATOM	2973	CA	ARG	A	390	10.649	34.768	68.036	1.00	54.65	AAAA
ATOM	2974	CB	ARG	A	390	10.553	35.995	67.150	1.00	56.18	AAAA
ATOM	2975	CG	ARG	A	390	11.365	37.140	67.676	1.00	59.88	AAAA
ATOM	2976	CD	ARG	A	390	10.779	38.453	67.247	1.00	63.03	AAAA
ATOM	2977	NE	ARG	A	390	11.626	39.559	67.667	1.00	66.68	AAAA
ATOM	2978	CZ	ARG	A	390	11.227	40.824	67.730	1.00	67.99	AAAA
ATOM	2979	NH1	ARG	A	390	9.982	41.152	67.402	1.00	68.02	AAAA
ATOM	2980	NH2	ARG	A	390	12.079	41.761	68.123	1.00	68.55	AAAA
ATOM	2981	C	ARG	A	390	9.648	33.713	67.603	1.00	52.37	AAAA
ATOM	2982	O	ARG	A	390	9.680	33.215	66.484	1.00	53.42	AAAA
ATOM	2983	N	THR	A	391	8.769	33.372	68.526	1.00	50.09	AAAA
ATOM	2984	CA	THR	A	391	7.756	32.355	68.325	1.00	47.66	AAAA
ATOM	2985	CB	THR	A	391	6.998	32.137	69.658	1.00	46.75	AAAA
ATOM	2986	OG1	THR	A	391	7.531	30.974	70.295	1.00	44.71	AAAA
ATOM	2987	CG2	THR	A	391	5.489	32.002	69.451	1.00	46.77	AAAA
ATOM	2988	C	THR	A	391	6.783	32.588	67.171	1.00	46.02	AAAA
ATOM	2989	O	THR	A	391	6.329	31.631	66.551	1.00	45.22	AAAA
ATOM	2990	N	ASP	A	392	6.461	33.845	66.884	1.00	43.37	AAAA
ATOM	2991	CA	ASP	A	392	5.549	34.149	65.790	1.00	42.78	AAAA
ATOM	2992	CB	ASP	A	392	4.097	34.061	66.259	1.00	42.82	AAAA
ATOM	2993	CG	ASP	A	392	3.724	35.140	67.261	1.00	46.41	AAAA
ATOM	2994	OD1	ASP	A	392	2.536	35.167	67.649	1.00	48.69	AAAA
ATOM	2995	OD2	ASP	A	392	4.587	35.954	67.666	1.00	46.65	AAAA

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ATOM	2996	C	ASP	A	392	5.836	35.516	65.182	1.00	41.53	AAAA
ATOM	2997	O	ASP	A	392	6.817	36.158	65.539	1.00	42.13	AAAA
ATOM	2998	N	LEU	A	393	4.992	35.956	64.257	1.00	39.22	AAAA
ATOM	2999	CA	LEU	A	393	5.203	37.241	63.592	1.00	39.03	AAAA
ATOM	3000	CB	LEU	A	393	4.708	37.160	62.144	1.00	37.42	AAAA
ATOM	3001	CG	LEU	A	393	5.244	35.994	61.300	1.00	36.28	AAAA
ATOM	3002	CD1	LEU	A	393	4.496	35.931	59.991	1.00	35.45	AAAA
ATOM	3003	CD2	LEU	A	393	6.715	36.143	61.059	1.00	33.25	AAAA
ATOM	3004	C	LEU	A	393	4.501	38.381	64.331	1.00	39.67	AAAA
ATOM	3005	O	LEU	A	393	3.715	39.136	63.743	1.00	40.39	AAAA
ATOM	3006	N	HIS	A	394	4.813	38.507	65.619	1.00	39.69	AAAA
ATOM	3007	CA	HIS	A	394	4.222	39.526	66.484	1.00	39.27	AAAA
ATOM	3008	CB	HIS	A	394	4.910	39.532	67.857	1.00	40.55	AAAA
ATOM	3009	CG	HIS	A	394	4.159	40.305	68.898	1.00	42.72	AAAA
ATOM	3010	CD2	HIS	A	394	4.301	41.577	69.342	1.00	43.51	AAAA
ATOM	3011	ND1	HIS	A	394	3.060	39.795	69.554	1.00	42.77	AAAA
ATOM	3012	CE1	HIS	A	394	2.556	40.719	70.353	1.00	41.69	AAAA
ATOM	3013	NE2	HIS	A	394	3.289	41.811	70.242	1.00	41.97	AAAA
ATOM	3014	C	HIS	A	394	4.292	40.926	65.893	1.00	38.79	AAAA
ATOM	3015	O	HIS	A	394	3.351	41.709	66.013	1.00	38.38	AAAA
ATOM	3016	N	ALA	A	395	5.410	41.249	65.257	1.00	37.20	AAAA
ATOM	3017	CA	ALA	A	395	5.554	42.571	64.674	1.00	35.92	AAAA
ATOM	3018	CB	ALA	A	395	6.925	42.701	64.028	1.00	34.88	AAAA
ATOM	3019	C	ALA	A	395	4.462	42.932	63.662	1.00	36.31	AAAA
ATOM	3020	O	ALA	A	395	4.301	44.104	63.343	1.00	37.51	AAAA
ATOM	3021	N	PHE	A	396	3.728	41.937	63.147	1.00	34.95	AAAA
ATOM	3022	CA	PHE	A	396	2.667	42.190	62.163	1.00	32.11	AAAA
ATOM	3023	CB	PHE	A	396	2.853	41.330	60.905	1.00	28.04	AAAA
ATOM	3024	CG	PHE	A	396	3.968	41.767	60.007	1.00	24.47	AAAA
ATOM	3025	CD1	PHE	A	396	3.909	42.970	59.329	1.00	25.86	AAAA
ATOM	3026	CD2	PHE	A	396	5.075	40.970	59.827	1.00	22.38	AAAA
ATOM	3027	CE1	PHE	A	396	4.944	43.370	58.487	1.00	22.17	AAAA
ATOM	3028	CE2	PHE	A	396	6.108	41.365	58.990	1.00	22.12	AAAA
ATOM	3029	CZ	PHE	A	396	6.039	42.565	58.324	1.00	21.32	AAAA
ATOM	3030	C	PHE	A	396	1.289	41.873	62.737	1.00	33.87	AAAA
ATOM	3031	O	PHE	A	396	0.309	41.796	61.995	1.00	33.82	AAAA
ATOM	3032	N	GLU	A	397	1.191	41.690	64.048	1.00	35.27	AAAA
ATOM	3033	CA	GLU	A	397	-0.106	41.356	64.606	1.00	37.65	AAAA
ATOM	3034	CB	GLU	A	397	0.016	40.929	66.058	1.00	39.15	AAAA
ATOM	3035	CG	GLU	A	397	0.339	42.015	67.046	1.00	40.94	AAAA
ATOM	3036	CD	GLU	A	397	0.031	41.548	68.458	1.00	42.45	AAAA
ATOM	3037	OE1	GLU	A	397	0.258	40.348	68.735	1.00	41.69	AAAA
ATOM	3038	OE2	GLU	A	397	-0.434	42.364	69.280	1.00	43.60	AAAA
ATOM	3039	C	GLU	A	397	-1.191	42.419	64.477	1.00	39.31	AAAA
ATOM	3040	O	GLU	A	397	-2.299	42.216	64.956	1.00	37.98	AAAA
ATOM	3041	N	ASN	A	398	-0.880	43.541	63.833	1.00	40.58	AAAA
ATOM	3042	CA	ASN	A	398	-1.870	44.592	63.630	1.00	41.85	AAAA
ATOM	3043	CB	ASN	A	398	-1.397	45.923	64.212	1.00	42.79	AAAA
ATOM	3044	CG	ASN	A	398	-1.321	45.905	65.718	1.00	42.51	AAAA
ATOM	3045	OD1	ASN	A	398	-2.222	45.395	66.395	1.00	42.06	AAAA
ATOM	3046	ND2	ASN	A	398	-0.252	46.476	66.258	1.00	41.25	AAAA
ATOM	3047	C	ASN	A	398	-2.158	44.777	62.146	1.00	43.00	AAAA
ATOM	3048	O	ASN	A	398	-3.050	45.537	61.775	1.00	44.33	AAAA
ATOM	3049	N	LEU	A	399	-1.383	44.100	61.303	1.00	42.42	AAAA
ATOM	3050	CA	LEU	A	399	-1.580	44.164	59.865	1.00	42.43	AAAA
ATOM	3051	CB	LEU	A	399	-0.602	43.232	59.156	1.00	40.93	AAAA
ATOM	3052	CG	LEU	A	399	-0.826	43.085	57.650	1.00	39.84	AAAA
ATOM	3053	CD1	LEU	A	399	-0.655	44.452	56.990	1.00	40.60	AAAA
ATOM	3054	CD2	LEU	A	399	0.141	42.067	57.070	1.00	35.40	AAAA
ATOM	3055	C	LEU	A	399	-3.011	43.714	59.579	1.00	44.64	AAAA
ATOM	3056	O	LEU	A	399	-3.375	42.573	59.867	1.00	46.72	AAAA
ATOM	3057	N	GLU	A	400	-3.821	44.607	59.016	1.00	44.78	AAAA
ATOM	3058	CA	GLU	A	400	-5.214	44.287	58.730	1.00	44.74	AAAA
ATOM	3059	CB	GLU	A	400	-6.113	45.482	59.080	1.00	47.98	AAAA
ATOM	3060	CG	GLU	A	400	-6.194	45.862	60.557	1.00	53.25	AAAA
ATOM	3061	CD	GLU	A	400	-7.079	47.086	60.792	1.00	57.33	AAAA
ATOM	3062	OE1	GLU	A	400	-6.744	48.177	60.275	1.00	59.63	AAAA
ATOM	3063	OE2	GLU	A	400	-8.114	46.960	61.487	1.00	61.16	AAAA
ATOM	3064	C	GLU	A	400	-5.516	43.872	57.292	1.00	42.82	AAAA
ATOM	3065	O	GLU	A	400	-6.299	42.951	57.069	1.00	41.36	AAAA
ATOM	3066	N	ILE	A	401	-4.904	44.552	56.323	1.00	40.71	AAAA
ATOM	3067	CA	ILE	A	401	-5.170	44.285	54.911	1.00	38.68	AAAA
ATOM	3068	CB	ILE	A	401	-6.059	45.438	54.279	1.00	41.72	AAAA
ATOM	3069	CG2	ILE	A	401	-6.282	45.206	52.779	1.00	42.03	AAAA
ATOM	3070	CG1	ILE	A	401	-7.437	45.511	54.952	1.00	43.20	AAAA

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ATOM	3071	CD1	ILE	A	401	-7.450	46.189	56.318	1.00	43.84	AAAA
ATOM	3072	C	ILE	A	401	-3.913	44.171	54.065	1.00	36.42	AAAA
ATOM	3073	O	ILE	A	401	-2.980	44.951	54.231	1.00	37.28	AAAA
ATOM	3074	N	ILE	A	402	-3.893	43.184	53.173	1.00	32.73	AAAA
ATOM	3075	CA	ILE	A	402	-2.797	42.992	52.223	1.00	32.20	AAAA
ATOM	3076	CB	ILE	A	402	-2.084	41.625	52.378	1.00	31.77	AAAA
ATOM	3077	CG2	ILE	A	402	-1.119	41.403	51.205	1.00	27.65	AAAA
ATOM	3078	CG1	ILE	A	402	-1.352	41.548	53.713	1.00	30.61	AAAA
ATOM	3079	CD1	ILE	A	402	-0.577	40.247	53.899	1.00	30.46	AAAA
ATOM	3080	C	ILE	A	402	-3.563	42.982	50.896	1.00	33.42	AAAA
ATOM	3081	O	ILE	A	402	-4.300	42.035	50.615	1.00	32.63	AAAA
ATOM	3082	N	ARG	A	403	-3.387	44.024	50.087	1.00	33.10	AAAA
ATOM	3083	CA	ARG	A	403	-4.119	44.149	48.830	1.00	33.91	AAAA
ATOM	3084	CB	ARG	A	403	-4.269	45.631	48.473	1.00	34.86	AAAA
ATOM	3085	CG	ARG	A	403	-5.147	46.404	49.452	1.00	34.32	AAAA
ATOM	3086	CD	ARG	A	403	-5.340	47.836	48.989	1.00	35.94	AAAA
ATOM	3087	NE	ARG	A	403	-5.860	48.690	50.056	1.00	35.87	AAAA
ATOM	3088	CZ	ARG	A	403	-7.068	48.571	50.591	1.00	34.55	AAAA
ATOM	3089	NH1	ARG	A	403	-7.908	47.638	50.155	1.00	35.36	AAAA
ATOM	3090	NH2	ARG	A	403	-7.418	49.359	51.591	1.00	32.60	AAAA
ATOM	3091	C	ARG	A	403	-3.646	43.382	47.598	1.00	34.25	AAAA
ATOM	3092	O	ARG	A	403	-4.441	43.116	46.701	1.00	34.66	AAAA
ATOM	3093	N	GLY	A	404	-2.367	43.038	47.544	1.00	33.18	AAAA
ATOM	3094	CA	GLY	A	404	-1.860	42.301	46.403	1.00	30.77	AAAA
ATOM	3095	C	GLY	A	404	-1.787	43.047	45.078	1.00	30.29	AAAA
ATOM	3096	O	GLY	A	404	-1.700	42.411	44.034	1.00	27.77	AAAA
ATOM	3097	N	ARG	A	405	-1.816	44.379	45.103	1.00	31.88	AAAA
ATOM	3098	CA	ARG	A	405	-1.734	45.159	43.867	1.00	31.46	AAAA
ATOM	3099	CB	ARG	A	405	-1.681	46.655	44.163	1.00	32.21	AAAA
ATOM	3100	CG	ARG	A	405	-2.902	47.177	44.901	1.00	35.85	AAAA
ATOM	3101	CD	ARG	A	405	-3.544	48.375	44.215	1.00	38.24	AAAA
ATOM	3102	NE	ARG	A	405	-4.866	48.637	44.771	1.00	40.90	AAAA
ATOM	3103	CZ	ARG	A	405	-5.111	49.430	45.809	1.00	41.47	AAAA
ATOM	3104	NH1	ARG	A	405	-4.122	50.065	46.415	1.00	43.47	AAAA
ATOM	3105	NH2	ARG	A	405	-6.350	49.565	46.259	1.00	42.42	AAAA
ATOM	3106	C	ARG	A	405	-0.491	44.735	43.110	1.00	33.27	AAAA
ATOM	3107	O	ARG	A	405	-0.441	44.833	41.889	1.00	35.95	AAAA
ATOM	3108	N	THR	A	406	0.524	44.290	43.845	1.00	32.60	AAAA
ATOM	3109	CA	THR	A	406	1.753	43.788	43.242	1.00	30.80	AAAA
ATOM	3110	CB	THR	A	406	2.967	44.728	43.476	1.00	29.99	AAAA
ATOM	3111	OG1	THR	A	406	2.854	45.358	44.749	1.00	31.07	AAAA
ATOM	3112	CG2	THR	A	406	3.034	45.806	42.404	1.00	27.41	AAAA
ATOM	3113	C	THR	A	406	1.960	42.442	43.923	1.00	33.33	AAAA
ATOM	3114	O	THR	A	406	1.582	42.277	45.093	1.00	33.06	AAAA
ATOM	3115	N	LYS	A	407	2.512	41.468	43.194	1.00	32.61	AAAA
ATOM	3116	CA	LYS	A	407	2.714	40.135	43.751	1.00	32.20	AAAA
ATOM	3117	CB	LYS	A	407	1.629	39.207	43.225	1.00	35.33	AAAA
ATOM	3118	CG	LYS	A	407	0.219	39.711	43.485	1.00	37.79	AAAA
ATOM	3119	CD	LYS	A	407	-0.819	38.665	43.069	1.00	43.28	AAAA
ATOM	3120	CE	LYS	A	407	-1.413	38.923	41.687	1.00	42.13	AAAA
ATOM	3121	NZ	LYS	A	407	-2.341	40.087	41.719	1.00	42.06	AAAA
ATOM	3122	C	LYS	A	407	4.085	39.520	43.476	1.00	31.39	AAAA
ATOM	3123	O	LYS	A	407	4.719	39.829	42.473	1.00	30.69	AAAA
ATOM	3124	N	GLN	A	408	4.545	38.660	44.383	1.00	28.08	AAAA
ATOM	3125	CA	GLN	A	408	5.824	38.009	44.210	1.00	26.83	AAAA
ATOM	3126	CB	GLN	A	408	6.207	37.259	45.485	1.00	29.35	AAAA
ATOM	3127	CG	GLN	A	408	7.498	36.460	45.371	1.00	29.16	AAAA
ATOM	3128	CD	GLN	A	408	8.694	37.328	45.068	1.00	32.86	AAAA
ATOM	3129	OE1	GLN	A	408	8.565	38.379	44.434	1.00	33.61	AAAA
ATOM	3130	NE2	GLN	A	408	9.876	36.891	45.504	1.00	32.46	AAAA
ATOM	3131	C	GLN	A	408	5.714	37.038	43.041	1.00	29.12	AAAA
ATOM	3132	O	GLN	A	408	4.789	36.233	42.980	1.00	29.53	AAAA
ATOM	3133	N	HIS	A	409	6.661	37.110	42.115	1.00	31.98	AAAA
ATOM	3134	CA	HIS	A	409	6.649	36.251	40.933	1.00	32.56	AAAA
ATOM	3135	CB	HIS	A	409	6.859	34.782	41.320	1.00	36.90	AAAA
ATOM	3136	CG	HIS	A	409	8.107	34.517	42.106	1.00	40.38	AAAA
ATOM	3137	CD2	HIS	A	409	8.396	33.550	43.011	1.00	40.38	AAAA
ATOM	3138	ND1	HIS	A	409	9.268	35.244	41.939	1.00	42.93	AAAA
ATOM	3139	CE1	HIS	A	409	10.218	34.734	42.703	1.00	42.58	AAAA
ATOM	3140	NE2	HIS	A	409	9.716	33.704	43.364	1.00	41.57	AAAA
ATOM	3141	C	HIS	A	409	5.321	36.385	40.169	1.00	32.06	AAAA
ATOM	3142	O	HIS	A	409	4.923	35.489	39.436	1.00	34.04	AAAA
ATOM	3143	N	GLY	A	410	4.633	37.500	40.360	1.00	31.46	AAAA
ATOM	3144	CA	GLY	A	410	3.376	37.730	39.679	1.00	31.99	AAAA
ATOM	3145	C	GLY	A	410	2.202	36.971	40.264	1.00	34.58	AAAA

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ATOM	3146	O	GLY A 410	1.047	37.205	39.899	1.00	35.65	AAAA
ATOM	3147	N	GLN A 411	2.483	36.079	41.205	1.00	34.61	AAAA
ATOM	3148	CA	GLN A 411	1.436	35.261	41.785	1.00	30.65	AAAA
ATOM	3149	CB	GLN A 411	1.772	33.791	41.528	1.00	30.85	AAAA
ATOM	3150	CG	GLN A 411	0.926	32.821	42.321	1.00	31.95	AAAA
ATOM	3151	CD	GLN A 411	1.006	31.407	41.796	1.00	32.13	AAAA
ATOM	3152	OE1	GLN A 411	1.931	31.054	41.055	1.00	30.07	AAAA
ATOM	3153	NE2	GLN A 411	0.037	30.576	42.187	1.00	29.77	AAAA
ATOM	3154	C	GLN A 411	1.094	35.440	43.254	1.00	30.98	AAAA
ATOM	3155	O	GLN A 411	-0.082	35.505	43.610	1.00	32.89	AAAA
ATOM	3156	N	PHE A 412	2.106	35.538	44.112	1.00	31.05	AAAA
ATOM	3157	CA	PHE A 412	1.845	35.618	45.544	1.00	29.50	AAAA
ATOM	3158	CB	PHE A 412	2.808	34.704	46.272	1.00	29.50	AAAA
ATOM	3159	CG	PHE A 412	2.868	33.337	45.678	1.00	30.14	AAAA
ATOM	3160	CD1	PHE A 412	3.728	33.062	44.628	1.00	27.26	AAAA
ATOM	3161	CD2	PHE A 412	2.024	32.335	46.129	1.00	30.75	AAAA
ATOM	3162	CE1	PHE A 412	3.743	31.813	44.045	1.00	29.95	AAAA
ATOM	3163	CE2	PHE A 412	2.041	31.084	45.544	1.00	27.81	AAAA
ATOM	3164	CZ	PHE A 412	2.899	30.822	44.504	1.00	26.31	AAAA
ATOM	3165	C	PHE A 412	1.770	36.955	46.239	1.00	29.38	AAAA
ATOM	3166	O	PHE A 412	2.570	37.865	46.023	1.00	32.43	AAAA
ATOM	3167	N	SER A 413	0.775	37.028	47.103	1.00	27.36	AAAA
ATOM	3168	CA	SER A 413	0.457	38.207	47.859	1.00	26.79	AAAA
ATOM	3169	CB	SER A 413	-1.051	38.339	47.877	1.00	22.05	AAAA
ATOM	3170	OG	SER A 413	-1.410	39.398	48.714	1.00	34.64	AAAA
ATOM	3171	C	SER A 413	1.017	38.145	49.289	1.00	26.59	AAAA
ATOM	3172	O	SER A 413	1.358	39.169	49.877	1.00	24.96	AAAA
ATOM	3173	N	LEU A 414	1.082	36.930	49.828	1.00	25.83	AAAA
ATOM	3174	CA	LEU A 414	1.597	36.650	51.159	1.00	26.28	AAAA
ATOM	3175	CB	LEU A 414	0.466	36.382	52.146	1.00	26.82	AAAA
ATOM	3176	CG	LEU A 414	0.909	36.044	53.580	1.00	27.88	AAAA
ATOM	3177	CD1	LEU A 414	1.694	37.203	54.165	1.00	23.02	AAAA
ATOM	3178	CD2	LEU A 414	-0.314	35.739	54.447	1.00	27.17	AAAA
ATOM	3179	C	LEU A 414	2.423	35.391	51.029	1.00	27.59	AAAA
ATOM	3180	O	LEU A 414	1.914	34.355	50.613	1.00	28.43	AAAA
ATOM	3181	N	ALA A 415	3.697	35.478	51.385	1.00	27.64	AAAA
ATOM	3182	CA	ALA A 415	4.593	34.341	51.294	1.00	27.39	AAAA
ATOM	3183	CB	ALA A 415	5.527	34.530	50.115	1.00	23.83	AAAA
ATOM	3184	C	ALA A 415	5.395	34.170	52.586	1.00	29.02	AAAA
ATOM	3185	O	ALA A 415	6.296	34.954	52.874	1.00	32.17	AAAA
ATOM	3186	N	VAL A 416	5.062	33.156	53.374	1.00	29.48	AAAA
ATOM	3187	CA	VAL A 416	5.786	32.891	54.612	1.00	28.69	AAAA
ATOM	3188	CB	VAL A 416	4.837	32.839	55.813	1.00	28.71	AAAA
ATOM	3189	CG1	VAL A 416	5.616	32.517	57.077	1.00	31.26	AAAA
ATOM	3190	CG2	VAL A 416	4.124	34.186	55.968	1.00	31.37	AAAA
ATOM	3191	C	VAL A 416	6.469	31.550	54.470	1.00	29.24	AAAA
ATOM	3192	O	VAL A 416	5.821	30.526	54.626	1.00	30.85	AAAA
ATOM	3193	N	VAL A 417	7.770	31.544	54.181	1.00	30.25	AAAA
ATOM	3194	CA	VAL A 417	8.492	30.276	54.003	1.00	33.97	AAAA
ATOM	3195	CB	VAL A 417	8.780	29.990	52.498	1.00	33.75	AAAA
ATOM	3196	CG1	VAL A 417	7.493	30.072	51.698	1.00	36.76	AAAA
ATOM	3197	CG2	VAL A 417	9.791	30.969	51.956	1.00	32.33	AAAA
ATOM	3198	C	VAL A 417	9.817	30.072	54.750	1.00	34.16	AAAA
ATOM	3199	O	VAL A 417	10.552	31.015	55.037	1.00	33.48	AAAA
ATOM	3200	N	SER A 418	10.096	28.802	55.032	1.00	36.16	AAAA
ATOM	3201	CA	SER A 418	11.301	28.327	55.713	1.00	34.99	AAAA
ATOM	3202	CB	SER A 418	12.481	28.335	54.737	1.00	36.95	AAAA
ATOM	3203	OG	SER A 418	12.760	29.638	54.276	1.00	40.19	AAAA
ATOM	3204	C	SER A 418	11.720	29.004	57.008	1.00	34.42	AAAA
ATOM	3205	O	SER A 418	12.903	29.226	57.221	1.00	35.63	AAAA
ATOM	3206	N	LEU A 419	10.759	29.311	57.873	1.00	32.61	AAAA
ATOM	3207	CA	LEU A 419	11.037	29.942	59.160	1.00	31.43	AAAA
ATOM	3208	CB	LEU A 419	10.028	31.057	59.450	1.00	28.09	AAAA
ATOM	3209	CG	LEU A 419	9.725	32.153	58.431	1.00	27.65	AAAA
ATOM	3210	CD1	LEU A 419	8.666	33.082	59.011	1.00	27.00	AAAA
ATOM	3211	CD2	LEU A 419	10.974	32.941	58.092	1.00	26.15	AAAA
ATOM	3212	C	LEU A 419	10.936	28.923	60.301	1.00	33.50	AAAA
ATOM	3213	O	LEU A 419	10.602	27.761	60.088	1.00	32.61	AAAA
ATOM	3214	N	ASN A 420	11.210	29.377	61.521	1.00	36.81	AAAA
ATOM	3215	CA	ASN A 420	11.122	28.513	62.692	1.00	37.79	AAAA
ATOM	3216	CB	ASN A 420	12.461	28.451	63.436	1.00	40.65	AAAA
ATOM	3217	CG	ASN A 420	13.442	27.473	62.805	1.00	45.18	AAAA
ATOM	3218	OD1	ASN A 420	13.066	26.629	61.989	1.00	46.59	AAAA
ATOM	3219	ND2	ASN A 420	14.709	27.572	63.199	1.00	46.78	AAAA
ATOM	3220	C	ASN A 420	10.019	28.947	63.662	1.00	36.56	AAAA

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ATOM	3221	O	ASN	A	420	9.961	28.448	64.784	1.00	38.66	AAAA
ATOM	3222	N	ILE	A	421	9.148	29.862	63.234	1.00	33.59	AAAA
ATOM	3223	CA	ILE	A	421	8.045	30.326	64.082	1.00	32.49	AAAA
ATOM	3224	CB	ILE	A	421	7.232	31.440	63.384	1.00	32.51	AAAA
ATOM	3225	CG2	ILE	A	421	8.113	32.635	63.119	1.00	30.93	AAAA
ATOM	3226	CG1	ILE	A	421	6.669	30.917	62.053	1.00	34.10	AAAA
ATOM	3227	CD1	ILE	A	421	5.656	31.835	61.402	1.00	29.68	AAAA
ATOM	3228	C	ILE	A	421	7.106	29.149	64.376	1.00	31.48	AAAA
ATOM	3229	O	ILE	A	421	6.994	28.236	63.562	1.00	32.07	AAAA
ATOM	3230	N	THR	A	422	6.438	29.160	65.527	1.00	30.70	AAAA
ATOM	3231	CA	THR	A	422	5.528	28.066	65.880	1.00	31.45	AAAA
ATOM	3232	CB	THR	A	422	5.677	27.647	67.363	1.00	29.91	AAAA
ATOM	3233	OG1	THR	A	422	5.460	28.777	68.211	1.00	32.39	AAAA
ATOM	3234	CG2	THR	A	422	7.052	27.075	67.614	1.00	29.53	AAAA
ATOM	3235	C	THR	A	422	4.054	28.370	65.607	1.00	32.25	AAAA
ATOM	3236	O	THR	A	422	3.216	27.469	65.620	1.00	31.88	AAAA
ATOM	3237	N	SER	A	423	3.747	29.646	65.390	1.00	32.71	AAAA
ATOM	3238	CA	SER	A	423	2.402	30.095	65.059	1.00	33.06	AAAA
ATOM	3239	CB	SER	A	423	1.598	30.400	66.313	1.00	33.84	AAAA
ATOM	3240	OG	SER	A	423	2.213	31.405	67.074	1.00	36.69	AAAA
ATOM	3241	C	SER	A	423	2.576	31.349	64.212	1.00	34.36	AAAA
ATOM	3242	O	SER	A	423	3.672	31.915	64.157	1.00	34.06	AAAA
ATOM	3243	N	LEU	A	424	1.519	31.780	63.531	1.00	33.03	AAAA
ATOM	3244	CA	LEU	A	424	1.647	32.959	62.680	1.00	32.77	AAAA
ATOM	3245	CB	LEU	A	424	0.648	32.889	61.514	1.00	28.78	AAAA
ATOM	3246	CG	LEU	A	424	1.046	31.884	60.426	1.00	27.49	AAAA
ATOM	3247	CD1	LEU	A	424	-0.072	31.712	59.421	1.00	24.33	AAAA
ATOM	3248	CD2	LEU	A	424	2.309	32.364	59.728	1.00	25.45	AAAA
ATOM	3249	C	LEU	A	424	1.506	34.273	63.441	1.00	32.75	AAAA
ATOM	3250	O	LEU	A	424	2.299	35.188	63.247	1.00	33.59	AAAA
ATOM	3251	N	GLY	A	425	0.503	34.363	64.305	1.00	33.28	AAAA
ATOM	3252	CA	GLY	A	425	0.304	35.576	65.074	1.00	32.96	AAAA
ATOM	3253	C	GLY	A	425	-0.436	36.697	64.369	1.00	34.18	AAAA
ATOM	3254	O	GLY	A	425	-0.725	37.721	64.993	1.00	34.58	AAAA
ATOM	3255	N	LEU	A	426	-0.774	36.507	63.093	1.00	34.49	AAAA
ATOM	3256	CA	LEU	A	426	-1.465	37.543	62.314	1.00	33.89	AAAA
ATOM	3257	CB	LEU	A	426	-1.389	37.188	60.830	1.00	30.87	AAAA
ATOM	3258	CG	LEU	A	426	0.084	37.020	60.438	1.00	31.97	AAAA
ATOM	3259	CD1	LEU	A	426	0.220	36.529	59.013	1.00	31.84	AAAA
ATOM	3260	CD2	LEU	A	426	0.814	38.343	60.634	1.00	29.65	AAAA
ATOM	3261	C	LEU	A	426	-2.906	37.796	62.754	1.00	34.97	AAAA
ATOM	3262	O	LEU	A	426	-3.858	37.610	61.986	1.00	34.20	AAAA
ATOM	3263	N	ARG	A	427	-3.036	38.261	63.997	1.00	34.55	AAAA
ATOM	3264	CA	ARG	A	427	-4.318	38.548	64.636	1.00	35.84	AAAA
ATOM	3265	CB	ARG	A	427	-4.085	39.046	66.057	1.00	36.41	AAAA
ATOM	3266	CG	ARG	A	427	-3.678	37.995	67.043	1.00	37.26	AAAA
ATOM	3267	CD	ARG	A	427	-3.520	38.607	68.419	1.00	37.41	AAAA
ATOM	3268	NE	ARG	A	427	-3.190	37.575	69.393	1.00	43.51	AAAA
ATOM	3269	CZ	ARG	A	427	-2.860	37.805	70.658	1.00	46.53	AAAA
ATOM	3270	NH1	ARG	A	427	-2.811	39.046	71.131	1.00	48.65	AAAA
ATOM	3271	NH2	ARG	A	427	-2.569	36.785	71.449	1.00	47.88	AAAA
ATOM	3272	C	ARG	A	427	-5.257	39.536	63.965	1.00	36.57	AAAA
ATOM	3273	O	ARG	A	427	-6.468	39.431	64.098	1.00	38.92	AAAA
ATOM	3274	N	SER	A	428	-4.711	40.510	63.266	1.00	37.48	AAAA
ATOM	3275	CA	SER	A	428	-5.550	41.501	62.639	1.00	39.29	AAAA
ATOM	3276	CB	SER	A	428	-4.914	42.867	62.846	1.00	43.18	AAAA
ATOM	3277	OG	SER	A	428	-4.542	43.035	64.203	1.00	46.22	AAAA
ATOM	3278	C	SER	A	428	-5.809	41.272	61.150	1.00	39.61	AAAA
ATOM	3279	O	SER	A	428	-6.681	41.910	60.575	1.00	39.07	AAAA
ATOM	3280	N	LEU	A	429	-5.062	40.358	60.536	1.00	38.24	AAAA
ATOM	3281	CA	LEU	A	429	-5.209	40.083	59.116	1.00	36.09	AAAA
ATOM	3282	CB	LEU	A	429	-4.219	39.004	58.689	1.00	30.99	AAAA
ATOM	3283	CG	LEU	A	429	-4.113	38.800	57.181	1.00	30.43	AAAA
ATOM	3284	CD1	LEU	A	429	-3.472	40.021	56.528	1.00	29.94	AAAA
ATOM	3285	CD2	LEU	A	429	-3.313	37.569	56.898	1.00	30.87	AAAA
ATOM	3286	C	LEU	A	429	-6.635	39.665	58.771	1.00	38.33	AAAA
ATOM	3287	O	LEU	A	429	-7.033	38.516	58.974	1.00	39.25	AAAA
ATOM	3288	N	LYS	A	430	-7.397	40.606	58.224	1.00	39.92	AAAA
ATOM	3289	CA	LYS	A	430	-8.784	40.357	57.882	1.00	41.82	AAAA
ATOM	3290	CB	LYS	A	430	-9.659	41.413	58.555	1.00	43.00	AAAA
ATOM	3291	CG	LYS	A	430	-9.634	41.335	60.088	1.00	48.52	AAAA
ATOM	3292	CD	LYS	A	430	-9.634	42.728	60.734	1.00	53.32	AAAA
ATOM	3293	CE	LYS	A	430	-9.464	42.678	62.265	1.00	54.90	AAAA
ATOM	3294	NZ	LYS	A	430	-9.312	44.051	62.867	1.00	54.69	AAAA
ATOM	3295	C	LYS	A	430	-9.074	40.303	56.387	1.00	42.89	AAAA

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ATOM	3296	O	LYS	A	430	-10.123	39.813	55.983	1.00	44.71	AAAA
ATOM	3297	N	GLU	A	431	-8.151	40.780	55.560	1.00	42.42	AAAA
ATOM	3298	CA	GLU	A	431	-8.381	40.762	54.121	1.00	41.33	AAAA
ATOM	3299	CB	GLU	A	431	-9.152	42.015	53.685	1.00	42.75	AAAA
ATOM	3300	CG	GLU	A	431	-9.326	42.095	52.159	1.00	43.51	AAAA
ATOM	3301	CD	GLU	A	431	-9.871	43.423	51.657	1.00	45.57	AAAA
ATOM	3302	OE1	GLU	A	431	-10.408	44.221	52.456	1.00	45.24	AAAA
ATOM	3303	OE2	GLU	A	431	-9.772	43.663	50.437	1.00	47.34	AAAA
ATOM	3304	C	GLU	A	431	-7.151	40.667	53.233	1.00	40.33	AAAA
ATOM	3305	O	GLU	A	431	-6.209	41.440	53.384	1.00	41.56	AAAA
ATOM	3306	N	ILE	A	432	-7.174	39.731	52.290	1.00	38.93	AAAA
ATOM	3307	CA	ILE	A	432	-6.088	39.602	51.322	1.00	37.51	AAAA
ATOM	3308	CB	ILE	A	432	-5.366	38.234	51.420	1.00	36.22	AAAA
ATOM	3309	CG2	ILE	A	432	-4.167	38.206	50.460	1.00	30.35	AAAA
ATOM	3310	CG1	ILE	A	432	-4.893	38.011	52.857	1.00	34.78	AAAA
ATOM	3311	CD1	ILE	A	432	-4.082	36.738	53.076	1.00	37.00	AAAA
ATOM	3312	C	ILE	A	432	-6.779	39.772	49.958	1.00	38.17	AAAA
ATOM	3313	O	ILE	A	432	-7.171	38.797	49.297	1.00	37.85	AAAA
ATOM	3314	N	SER	A	433	-6.951	41.043	49.593	1.00	36.65	AAAA
ATOM	3315	CA	SER	A	433	-7.606	41.496	48.369	1.00	36.13	AAAA
ATOM	3316	CB	SER	A	433	-7.129	42.900	48.028	1.00	34.62	AAAA
ATOM	3317	OG	SER	A	433	-7.441	43.787	49.073	1.00	35.32	AAAA
ATOM	3318	C	SER	A	433	-7.451	40.641	47.131	1.00	36.89	AAAA
ATOM	3319	O	SER	A	433	-8.429	40.352	46.432	1.00	38.16	AAAA
ATOM	3320	N	ASP	A	434	-6.217	40.256	46.850	1.00	34.89	AAAA
ATOM	3321	CA	ASP	A	434	-5.930	39.468	45.668	1.00	32.14	AAAA
ATOM	3322	CB	ASP	A	434	-5.884	40.396	44.455	1.00	31.80	AAAA
ATOM	3323	CG	ASP	A	434	-5.549	39.670	43.181	1.00	33.36	AAAA
ATOM	3324	OD1	ASP	A	434	-5.022	40.331	42.255	1.00	35.86	AAAA
ATOM	3325	OD2	ASP	A	434	-5.819	38.450	43.101	1.00	30.92	AAAA
ATOM	3326	C	ASP	A	434	-4.573	38.817	45.884	1.00	30.13	AAAA
ATOM	3327	O	ASP	A	434	-3.877	39.155	46.840	1.00	28.28	AAAA
ATOM	3328	N	GLY	A	435	-4.217	37.886	45.001	1.00	27.67	AAAA
ATOM	3329	CA	GLY	A	435	-2.945	37.195	45.090	1.00	26.23	AAAA
ATOM	3330	C	GLY	A	435	-3.050	35.891	45.854	1.00	26.72	AAAA
ATOM	3331	O	GLY	A	435	-3.981	35.692	46.636	1.00	25.12	AAAA
ATOM	3332	N	ASP	A	436	-2.106	34.986	45.630	1.00	25.98	AAAA
ATOM	3333	CA	ASP	A	436	-2.157	33.733	46.351	1.00	29.15	AAAA
ATOM	3334	CB	ASP	A	436	-1.656	32.579	45.476	1.00	30.89	AAAA
ATOM	3335	CG	ASP	A	436	-2.637	32.239	44.351	1.00	34.45	AAAA
ATOM	3336	OD1	ASP	A	436	-3.809	32.677	44.424	1.00	32.34	AAAA
ATOM	3337	OD2	ASP	A	436	-2.240	31.534	43.397	1.00	35.89	AAAA
ATOM	3338	C	ASP	A	436	-1.378	33.805	47.658	1.00	29.97	AAAA
ATOM	3339	O	ASP	A	436	-0.594	34.735	47.892	1.00	28.37	AAAA
ATOM	3340	N	VAL	A	437	-1.628	32.825	48.516	1.00	28.67	AAAA
ATOM	3341	CA	VAL	A	437	-0.990	32.756	49.812	1.00	26.55	AAAA
ATOM	3342	CB	VAL	A	437	-2.031	32.726	50.922	1.00	24.88	AAAA
ATOM	3343	CG1	VAL	A	437	-1.365	32.464	52.240	1.00	27.87	AAAA
ATOM	3344	CG2	VAL	A	437	-2.783	34.048	50.966	1.00	26.18	AAAA
ATOM	3345	C	VAL	A	437	-0.188	31.487	49.894	1.00	27.29	AAAA
ATOM	3346	O	VAL	A	437	-0.724	30.419	49.651	1.00	30.29	AAAA
ATOM	3347	N	ILE	A	438	1.102	31.585	50.183	1.00	26.85	AAAA
ATOM	3348	CA	ILE	A	438	1.877	30.371	50.336	1.00	28.40	AAAA
ATOM	3349	CB	ILE	A	438	2.871	30.135	49.192	1.00	27.35	AAAA
ATOM	3350	CG2	ILE	A	438	3.805	31.333	49.025	1.00	25.95	AAAA
ATOM	3351	CG1	ILE	A	438	3.641	28.836	49.473	1.00	26.86	AAAA
ATOM	3352	CD1	ILE	A	438	4.537	28.366	48.320	1.00	24.80	AAAA
ATOM	3353	C	ILE	A	438	2.619	30.374	51.666	1.00	31.64	AAAA
ATOM	3354	O	ILE	A	438	3.390	31.284	51.984	1.00	32.22	AAAA
ATOM	3355	N	ILE	A	439	2.344	29.349	52.457	1.00	32.22	AAAA
ATOM	3356	CA	ILE	A	439	2.966	29.196	53.755	1.00	32.40	AAAA
ATOM	3357	CB	ILE	A	439	1.945	29.395	54.835	1.00	32.15	AAAA
ATOM	3358	CG2	ILE	A	439	2.581	29.176	56.174	1.00	31.78	AAAA
ATOM	3359	CG1	ILE	A	439	1.350	30.799	54.688	1.00	30.50	AAAA
ATOM	3360	CD1	ILE	A	439	0.295	31.100	55.670	1.00	33.45	AAAA
ATOM	3361	C	ILE	A	439	3.508	27.793	53.798	1.00	33.89	AAAA
ATOM	3362	O	ILE	A	439	2.811	26.873	54.197	1.00	36.55	AAAA
ATOM	3363	N	SER	A	440	4.761	27.644	53.375	1.00	35.78	AAAA
ATOM	3364	CA	SER	A	440	5.420	26.349	53.293	1.00	37.10	AAAA
ATOM	3365	CB	SER	A	440	5.519	25.962	51.834	1.00	39.34	AAAA
ATOM	3366	OG	SER	A	440	6.216	26.982	51.143	1.00	41.12	AAAA
ATOM	3367	C	SER	A	440	6.826	26.304	53.880	1.00	38.94	AAAA
ATOM	3368	O	SER	A	440	7.501	27.340	53.984	1.00	39.95	AAAA
ATOM	3369	N	GLY	A	441	7.264	25.089	54.229	1.00	37.48	AAAA
ATOM	3370	CA	GLY	A	441	8.598	24.881	54.773	1.00	35.14	AAAA

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ATOM	3371	C	GLY	A	441	8.885	25.428	56.161	1.00	35.38	AAAA
ATOM	3372	O	GLY	A	441	10.038	25.637	56.523	1.00	34.49	AAAA
ATOM	3373	N	ASN	A	442	7.841	25.669	56.939	1.00	35.17	AAAA
ATOM	3374	CA	ASN	A	442	8.000	26.174	58.294	1.00	37.72	AAAA
ATOM	3375	CB	ASN	A	442	6.924	27.238	58.602	1.00	37.77	AAAA
ATOM	3376	CG	ASN	A	442	6.881	28.361	57.565	1.00	39.67	AAAA
ATOM	3377	OD1	ASN	A	442	7.788	29.197	57.488	1.00	39.02	AAAA
ATOM	3378	ND2	ASN	A	442	5.823	28.376	56.755	1.00	38.53	AAAA
ATOM	3379	C	ASN	A	442	7.824	24.950	59.202	1.00	38.94	AAAA
ATOM	3380	O	ASN	A	442	6.761	24.746	59.773	1.00	38.15	AAAA
ATOM	3381	N	LYS	A	443	8.881	24.150	59.317	1.00	40.62	AAAA
ATOM	3382	CA	LYS	A	443	8.895	22.920	60.103	1.00	42.67	AAAA
ATOM	3383	CB	LYS	A	443	10.334	22.448	60.289	1.00	45.06	AAAA
ATOM	3384	CG	LYS	A	443	11.124	23.289	61.278	1.00	52.58	AAAA
ATOM	3385	CD	LYS	A	443	12.613	22.930	61.254	1.00	56.29	AAAA
ATOM	3386	CE	LYS	A	443	13.415	23.836	62.177	1.00	57.90	AAAA
ATOM	3387	NZ	LYS	A	443	14.885	23.763	61.922	1.00	60.41	AAAA
ATOM	3388	C	LYS	A	443	8.206	22.896	61.466	1.00	42.88	AAAA
ATOM	3389	O	LYS	A	443	7.732	21.847	61.890	1.00	45.25	AAAA
ATOM	3390	N	ASN	A	444	8.152	24.021	62.165	1.00	41.70	AAAA
ATOM	3391	CA	ASN	A	444	7.515	24.031	63.476	1.00	40.04	AAAA
ATOM	3392	CB	ASN	A	444	8.469	24.604	64.527	1.00	42.37	AAAA
ATOM	3393	CG	ASN	A	444	9.791	23.866	64.569	1.00	45.77	AAAA
ATOM	3394	OD1	ASN	A	444	9.835	22.650	64.779	1.00	47.22	AAAA
ATOM	3395	ND2	ASN	A	444	10.879	24.597	64.364	1.00	47.29	AAAA
ATOM	3396	C	ASN	A	444	6.222	24.824	63.506	1.00	39.97	AAAA
ATOM	3397	O	ASN	A	444	5.632	25.024	64.570	1.00	42.75	AAAA
ATOM	3398	N	LEU	A	445	5.779	25.286	62.350	1.00	36.08	AAAA
ATOM	3399	CA	LEU	A	445	4.556	26.057	62.290	1.00	35.34	AAAA
ATOM	3400	CB	LEU	A	445	4.513	26.794	60.962	1.00	33.87	AAAA
ATOM	3401	CG	LEU	A	445	3.384	27.773	60.718	1.00	28.34	AAAA
ATOM	3402	CD1	LEU	A	445	3.327	28.806	61.823	1.00	27.85	AAAA
ATOM	3403	CD2	LEU	A	445	3.637	28.414	59.375	1.00	31.22	AAAA
ATOM	3404	C	LEU	A	445	3.333	25.152	62.442	1.00	35.86	AAAA
ATOM	3405	O	LEU	A	445	3.112	24.267	61.625	1.00	35.00	AAAA
ATOM	3406	N	CYS	A	446	2.519	25.411	63.463	1.00	37.68	AAAA
ATOM	3407	CA	CYS	A	446	1.340	24.588	63.739	1.00	39.94	AAAA
ATOM	3408	C	CYS	A	446	-0.107	25.066	63.571	1.00	40.85	AAAA
ATOM	3409	O	CYS	A	446	-1.012	24.248	63.709	1.00	43.72	AAAA
ATOM	3410	CB	CYS	A	446	1.433	24.032	65.165	1.00	38.56	AAAA
ATOM	3411	SG	CYS	A	446	2.359	22.483	65.301	1.00	43.91	AAAA
ATOM	3412	N	TYR	A	447	-0.392	26.327	63.296	1.00	40.76	AAAA
ATOM	3413	CA	TYR	A	447	-1.823	26.652	63.241	1.00	44.93	AAAA
ATOM	3414	CB	TYR	A	447	-2.156	27.704	64.318	1.00	46.01	AAAA
ATOM	3415	CG	TYR	A	447	-1.606	27.350	65.684	1.00	46.95	AAAA
ATOM	3416	CD1	TYR	A	447	-0.248	27.493	65.967	1.00	47.48	AAAA
ATOM	3417	CE1	TYR	A	447	0.278	27.099	67.190	1.00	47.21	AAAA
ATOM	3418	CD2	TYR	A	447	-2.427	26.805	66.672	1.00	48.22	AAAA
ATOM	3419	CE2	TYR	A	447	-1.907	26.408	67.903	1.00	47.96	AAAA
ATOM	3420	CZ	TYR	A	447	-0.554	26.559	68.152	1.00	48.74	AAAA
ATOM	3421	OH	TYR	A	447	-0.028	26.175	69.365	1.00	51.61	AAAA
ATOM	3422	C	TYR	A	447	-2.387	27.075	61.886	1.00	46.56	AAAA
ATOM	3423	O	TYR	A	447	-3.606	27.157	61.710	1.00	46.01	AAAA
ATOM	3424	N	ALA	A	448	-1.486	27.325	60.940	1.00	46.82	AAAA
ATOM	3425	CA	ALA	A	448	-1.824	27.729	59.587	1.00	47.31	AAAA
ATOM	3426	CB	ALA	A	448	-0.681	27.361	58.661	1.00	44.79	AAAA
ATOM	3427	C	ALA	A	448	-3.140	27.185	59.022	1.00	48.82	AAAA
ATOM	3428	O	ALA	A	448	-4.026	27.958	58.674	1.00	50.71	AAAA
ATOM	3429	N	ASN	A	449	-3.274	25.868	58.931	1.00	49.58	AAAA
ATOM	3430	CA	ASN	A	449	-4.484	25.260	58.373	1.00	50.05	AAAA
ATOM	3431	CB	ASN	A	449	-4.259	23.766	58.149	1.00	49.77	AAAA
ATOM	3432	CG	ASN	A	449	-3.356	23.486	56.974	1.00	51.26	AAAA
ATOM	3433	OD1	ASN	A	449	-3.639	23.907	55.849	1.00	53.23	AAAA
ATOM	3434	ND2	ASN	A	449	-2.260	22.771	57.221	1.00	50.42	AAAA
ATOM	3435	C	ASN	A	449	-5.802	25.430	59.125	1.00	50.47	AAAA
ATOM	3436	O	ASN	A	449	-6.848	25.059	58.610	1.00	51.49	AAAA
ATOM	3437	N	THR	A	450	-5.774	25.978	60.331	1.00	51.52	AAAA
ATOM	3438	CA	THR	A	450	-7.007	26.134	61.097	1.00	52.39	AAAA
ATOM	3439	CB	THR	A	450	-6.724	26.354	62.589	1.00	52.88	AAAA
ATOM	3440	OG1	THR	A	450	-6.066	27.614	62.766	1.00	54.14	AAAA
ATOM	3441	CG2	THR	A	450	-5.835	25.245	63.129	1.00	53.40	AAAA
ATOM	3442	C	THR	A	450	-7.820	27.315	60.600	1.00	53.01	AAAA
ATOM	3443	O	THR	A	450	-9.041	27.365	60.788	1.00	52.16	AAAA
ATOM	3444	N	ILE	A	451	-7.127	28.263	59.971	1.00	52.74	AAAA
ATOM	3445	CA	ILE	A	451	-7.755	29.467	59.444	1.00	51.33	AAAA

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ATOM	3446	CB	ILE	A	451	-6.744	30.608	59.247	1.00	51.16	AAAA
ATOM	3447	CG2	ILE	A	451	-7.480	31.920	59.018	1.00	51.22	AAAA
ATOM	3448	CG1	ILE	A	451	-5.837	30.729	60.471	1.00	51.46	AAAA
ATOM	3449	CD1	ILE	A	451	-4.352	30.743	60.113	1.00	48.45	AAAA
ATOM	3450	C	ILE	A	451	-8.370	29.187	58.091	1.00	50.88	AAAA
ATOM	3451	O	ILE	A	451	-7.774	28.523	57.249	1.00	52.01	AAAA
ATOM	3452	N	ASN	A	452	-9.571	29.708	57.893	1.00	50.28	AAAA
ATOM	3453	CA	ASN	A	452	-10.289	29.559	56.640	1.00	48.28	AAAA
ATOM	3454	CB	ASN	A	452	-11.786	29.521	56.959	1.00	50.28	AAAA
ATOM	3455	CG	ASN	A	452	-12.645	29.681	55.742	1.00	52.27	AAAA
ATOM	3456	OD1	ASN	A	452	-12.314	29.193	54.652	1.00	55.29	AAAA
ATOM	3457	ND2	ASN	A	452	-13.771	30.361	55.914	1.00	52.62	AAAA
ATOM	3458	C	ASN	A	452	-9.897	30.774	55.784	1.00	46.01	AAAA
ATOM	3459	O	ASN	A	452	-10.528	31.826	55.847	1.00	45.30	AAAA
ATOM	3460	N	TRP	A	453	-8.838	30.623	54.996	1.00	43.40	AAAA
ATOM	3461	CA	TRP	A	453	-8.328	31.719	54.178	1.00	42.38	AAAA
ATOM	3462	CB	TRP	A	453	-7.031	31.306	53.488	1.00	41.37	AAAA
ATOM	3463	CG	TRP	A	453	-5.991	30.839	54.442	1.00	41.57	AAAA
ATOM	3464	CD2	TRP	A	453	-4.953	31.626	55.042	1.00	40.43	AAAA
ATOM	3465	CE2	TRP	A	453	-4.247	30.783	55.918	1.00	40.31	AAAA
ATOM	3466	CE3	TRP	A	453	-4.555	32.963	54.925	1.00	40.95	AAAA
ATOM	3467	CD1	TRP	A	453	-5.872	29.591	54.962	1.00	41.60	AAAA
ATOM	3468	NE1	TRP	A	453	-4.830	29.547	55.851	1.00	42.67	AAAA
ATOM	3469	CZ2	TRP	A	453	-3.160	31.228	56.676	1.00	39.77	AAAA
ATOM	3470	CZ3	TRP	A	453	-3.472	33.407	55.682	1.00	38.55	AAAA
ATOM	3471	CH2	TRP	A	453	-2.790	32.539	56.544	1.00	37.51	AAAA
ATOM	3472	C	TRP	A	453	-9.272	32.288	53.141	1.00	42.53	AAAA
ATOM	3473	O	TRP	A	453	-9.234	33.483	52.865	1.00	41.19	AAAA
ATOM	3474	N	LYS	A	454	-10.103	31.430	52.558	1.00	44.87	AAAA
ATOM	3475	CA	LYS	A	454	-11.053	31.849	51.540	1.00	45.02	AAAA
ATOM	3476	CB	LYS	A	454	-11.972	30.689	51.164	1.00	48.03	AAAA
ATOM	3477	CG	LYS	A	454	-11.427	29.822	50.033	1.00	51.58	AAAA
ATOM	3478	CD	LYS	A	454	-12.354	28.655	49.709	1.00	54.35	AAAA
ATOM	3479	CE	LYS	A	454	-12.060	28.082	48.329	1.00	56.96	AAAA
ATOM	3480	NZ	LYS	A	454	-10.652	27.609	48.185	1.00	57.80	AAAA
ATOM	3481	C	LYS	A	454	-11.875	33.017	52.032	1.00	44.09	AAAA
ATOM	3482	O	LYS	A	454	-12.239	33.901	51.265	1.00	43.63	AAAA
ATOM	3483	N	LYS	A	455	-12.149	33.016	53.327	1.00	43.70	AAAA
ATOM	3484	CA	LYS	A	455	-12.932	34.063	53.951	1.00	43.78	AAAA
ATOM	3485	CB	LYS	A	455	-13.313	33.637	55.368	1.00	45.95	AAAA
ATOM	3486	CG	LYS	A	455	-14.493	34.394	55.951	1.00	49.78	AAAA
ATOM	3487	CD	LYS	A	455	-15.778	33.994	55.246	0.01	49.34	AAAA
ATOM	3488	CE	LYS	A	455	-16.996	34.605	55.911	0.01	50.06	AAAA
ATOM	3489	NZ	LYS	A	455	-18.258	34.130	55.279	0.01	50.24	AAAA
ATOM	3490	C	LYS	A	455	-12.183	35.392	53.998	1.00	43.75	AAAA
ATOM	3491	O	LYS	A	455	-12.740	36.400	54.418	1.00	45.40	AAAA
ATOM	3492	N	LEU	A	456	-10.923	35.399	53.577	1.00	43.62	AAAA
ATOM	3493	CA	LEU	A	456	-10.131	36.628	53.577	1.00	42.08	AAAA
ATOM	3494	CB	LEU	A	456	-8.759	36.393	54.202	1.00	41.82	AAAA
ATOM	3495	CG	LEU	A	456	-8.673	35.915	55.647	1.00	41.69	AAAA
ATOM	3496	CD1	LEU	A	456	-7.214	35.900	56.044	1.00	42.74	AAAA
ATOM	3497	CD2	LEU	A	456	-9.468	36.830	56.568	1.00	42.68	AAAA
ATOM	3498	C	LEU	A	456	-9.914	37.172	52.181	1.00	42.07	AAAA
ATOM	3499	O	LEU	A	456	-9.553	38.337	52.024	1.00	42.40	AAAA
ATOM	3500	N	PHE	A	457	-10.110	36.317	51.177	1.00	42.04	AAAA
ATOM	3501	CA	PHE	A	457	-9.922	36.680	49.779	1.00	41.47	AAAA
ATOM	3502	CB	PHE	A	457	-9.892	35.429	48.908	1.00	41.04	AAAA
ATOM	3503	CG	PHE	A	457	-8.804	34.459	49.251	1.00	39.69	AAAA
ATOM	3504	CD1	PHE	A	457	-7.586	34.898	49.756	1.00	40.78	AAAA
ATOM	3505	CD2	PHE	A	457	-8.974	33.102	49.001	1.00	40.12	AAAA
ATOM	3506	CE1	PHE	A	457	-6.546	34.003	50.005	1.00	38.89	AAAA
ATOM	3507	CE2	PHE	A	457	-7.948	32.199	49.244	1.00	41.59	AAAA
ATOM	3508	CZ	PHE	A	457	-6.727	32.652	49.749	1.00	41.17	AAAA
ATOM	3509	C	PHE	A	457	-10.999	37.617	49.235	1.00	42.85	AAAA
ATOM	3510	O	PHE	A	457	-12.134	37.605	49.698	1.00	41.99	AAAA
ATOM	3511	N	GLY	A	458	-10.634	38.420	48.238	1.00	44.52	AAAA
ATOM	3512	CA	GLY	A	458	-11.580	39.348	47.644	1.00	45.53	AAAA
ATOM	3513	C	GLY	A	458	-11.497	39.346	46.125	1.00	47.01	AAAA
ATOM	3514	O	GLY	A	458	-11.856	40.333	45.474	1.00	46.65	AAAA
ATOM	3515	N	THR	A	459	-11.025	38.233	45.567	1.00	45.77	AAAA
ATOM	3516	CA	THR	A	459	-10.873	38.075	44.127	1.00	46.11	AAAA
ATOM	3517	CB	THR	A	459	-9.486	38.600	43.672	1.00	44.48	AAAA
ATOM	3518	OG1	THR	A	459	-9.385	40.001	43.958	1.00	42.53	AAAA
ATOM	3519	CG2	THR	A	459	-9.281	38.384	42.187	1.00	41.79	AAAA
ATOM	3520	C	THR	A	459	-11.012	36.594	43.771	1.00	48.80	AAAA

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ATOM	3521	O	THR	A	459	-10.598	35.730	44.533	1.00	52.62	AAAA
ATOM	3522	N	SER	A	460	-11.605	36.292	42.623	1.00	50.60	AAAA
ATOM	3523	CA	SER	A	460	-11.774	34.898	42.210	1.00	51.81	AAAA
ATOM	3524	CB	SER	A	460	-12.620	34.802	40.930	1.00	53.51	AAAA
ATOM	3525	OG	SER	A	460	-13.932	35.308	41.121	1.00	56.86	AAAA
ATOM	3526	C	SER	A	460	-10.423	34.274	41.932	1.00	51.47	AAAA
ATOM	3527	O	SER	A	460	-9.458	34.974	41.649	1.00	53.37	AAAA
ATOM	3528	N	GLY	A	461	-10.352	32.955	42.013	1.00	50.95	AAAA
ATOM	3529	CA	GLY	A	461	-9.103	32.282	41.717	1.00	50.48	AAAA
ATOM	3530	C	GLY	A	461	-8.018	32.331	42.770	1.00	50.11	AAAA
ATOM	3531	O	GLY	A	461	-6.972	31.701	42.592	1.00	49.77	AAAA
ATOM	3532	N	GLN	A	462	-8.235	33.081	43.847	1.00	49.44	AAAA
ATOM	3533	CA	GLN	A	462	-7.235	33.143	44.912	1.00	49.09	AAAA
ATOM	3534	CB	GLN	A	462	-7.569	34.238	45.942	1.00	48.69	AAAA
ATOM	3535	CG	GLN	A	462	-7.213	35.662	45.499	1.00	48.02	AAAA
ATOM	3536	CD	GLN	A	462	-7.292	36.685	46.631	1.00	47.07	AAAA
ATOM	3537	OE1	GLN	A	462	-8.365	37.194	46.960	1.00	46.57	AAAA
ATOM	3538	NE2	GLN	A	462	-6.149	36.979	47.235	1.00	44.90	AAAA
ATOM	3539	C	GLN	A	462	-7.198	31.778	45.597	1.00	48.68	AAAA
ATOM	3540	O	GLN	A	462	-8.236	31.216	45.933	1.00	48.42	AAAA
ATOM	3541	N	LYS	A	463	-5.998	31.241	45.775	1.00	48.44	AAAA
ATOM	3542	CA	LYS	A	463	-5.831	29.951	46.422	1.00	47.72	AAAA
ATOM	3543	CB	LYS	A	463	-5.645	28.849	45.376	1.00	48.78	AAAA
ATOM	3544	CG	LYS	A	463	-4.507	29.064	44.408	1.00	49.19	AAAA
ATOM	3545	CD	LYS	A	463	-4.454	27.919	43.409	1.00	50.58	AAAA
ATOM	3546	CE	LYS	A	463	-3.559	28.241	42.211	1.00	52.58	AAAA
ATOM	3547	NZ	LYS	A	463	-2.137	28.476	42.596	1.00	54.20	AAAA
ATOM	3548	C	LYS	A	463	-4.650	29.960	47.383	1.00	46.69	AAAA
ATOM	3549	O	LYS	A	463	-3.853	30.899	47.406	1.00	45.54	AAAA
ATOM	3550	N	THR	A	464	-4.550	28.908	48.184	1.00	44.91	AAAA
ATOM	3551	CA	THR	A	464	-3.470	28.801	49.147	1.00	43.83	AAAA
ATOM	3552	CB	THR	A	464	-4.001	28.614	50.590	1.00	43.35	AAAA
ATOM	3553	OG1	THR	A	464	-4.593	27.312	50.723	1.00	42.98	AAAA
ATOM	3554	CG2	THR	A	464	-5.023	29.675	50.932	1.00	42.00	AAAA
ATOM	3555	C	THR	A	464	-2.571	27.613	48.846	1.00	43.93	AAAA
ATOM	3556	O	THR	A	464	-2.947	26.690	48.131	1.00	44.23	AAAA
ATOM	3557	N	LYS	A	465	-1.368	27.659	49.389	1.00	43.85	AAAA
ATOM	3558	CA	LYS	A	465	-0.423	26.573	49.245	1.00	44.57	AAAA
ATOM	3559	CB	LYS	A	465	0.658	26.910	48.225	1.00	44.79	AAAA
ATOM	3560	CG	LYS	A	465	1.372	25.686	47.682	1.00	46.31	AAAA
ATOM	3561	CD	LYS	A	465	0.422	24.809	46.877	0.01	46.45	AAAA
ATOM	3562	CE	LYS	A	465	1.139	23.610	46.276	0.01	46.84	AAAA
ATOM	3563	NZ	LYS	A	465	1.720	22.726	47.322	0.01	47.05	AAAA
ATOM	3564	C	LYS	A	465	0.153	26.516	50.645	1.00	44.75	AAAA
ATOM	3565	O	LYS	A	465	1.200	27.089	50.927	1.00	45.89	AAAA
ATOM	3566	N	ILE	A	466	-0.570	25.845	51.529	1.00	44.29	AAAA
ATOM	3567	CA	ILE	A	466	-0.166	25.739	52.914	1.00	45.39	AAAA
ATOM	3568	CB	ILE	A	466	-1.285	26.223	53.807	1.00	44.65	AAAA
ATOM	3569	CG2	ILE	A	466	-0.807	26.309	55.233	1.00	45.36	AAAA
ATOM	3570	CG1	ILE	A	466	-1.748	27.588	53.307	1.00	45.22	AAAA
ATOM	3571	CD1	ILE	A	466	-2.812	28.215	54.127	1.00	46.50	AAAA
ATOM	3572	C	ILE	A	466	0.210	24.328	53.299	1.00	47.29	AAAA
ATOM	3573	O	ILE	A	466	-0.518	23.646	54.013	1.00	48.50	AAAA
ATOM	3574	N	ILE	A	467	1.373	23.899	52.833	1.00	49.34	AAAA
ATOM	3575	CA	ILE	A	467	1.846	22.559	53.116	1.00	49.19	AAAA
ATOM	3576	CB	ILE	A	467	1.717	21.692	51.853	1.00	51.13	AAAA
ATOM	3577	CG2	ILE	A	467	0.251	21.496	51.506	1.00	51.46	AAAA
ATOM	3578	CG1	ILE	A	467	2.431	22.373	50.678	1.00	50.90	AAAA
ATOM	3579	CD1	ILE	A	467	3.940	22.312	50.739	1.00	50.04	AAAA
ATOM	3580	C	ILE	A	467	3.295	22.493	53.607	1.00	48.40	AAAA
ATOM	3581	O	ILE	A	467	4.030	23.484	53.619	1.00	47.26	AAAA
ATOM	3582	N	SER	A	468	3.686	21.291	54.006	1.00	47.71	AAAA
ATOM	3583	CA	SER	A	468	5.034	21.006	54.463	1.00	45.41	AAAA
ATOM	3584	CB	SER	A	468	6.010	21.109	53.294	1.00	46.51	AAAA
ATOM	3585	OG	SER	A	468	5.651	20.212	52.254	1.00	49.38	AAAA
ATOM	3586	C	SER	A	468	5.543	21.848	55.605	1.00	43.11	AAAA
ATOM	3587	O	SER	A	468	6.711	22.216	55.627	1.00	42.90	AAAA
ATOM	3588	N	ASN	A	469	4.672	22.167	56.550	1.00	41.20	AAAA
ATOM	3589	CA	ASN	A	469	5.100	22.928	57.715	1.00	40.54	AAAA
ATOM	3590	CB	ASN	A	469	4.064	23.994	58.090	1.00	38.22	AAAA
ATOM	3591	CG	ASN	A	469	3.833	24.996	56.970	1.00	37.70	AAAA
ATOM	3592	OD1	ASN	A	469	4.775	25.583	56.443	1.00	38.17	AAAA
ATOM	3593	ND2	ASN	A	469	2.581	25.190	56.598	1.00	37.18	AAAA
ATOM	3594	C	ASN	A	469	5.213	21.873	58.803	1.00	42.38	AAAA
ATOM	3595	O	ASN	A	469	5.903	20.869	58.632	1.00	44.03	AAAA

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ATOM	3596	N	ARG	A	470	4.534	22.078	59.918	1.00	42.59	AAAA
ATOM	3597	CA	ARG	A	470	4.573	21.103	60.984	1.00	42.94	AAAA
ATOM	3598	CB	ARG	A	470	4.503	21.812	62.328	1.00	45.13	AAAA
ATOM	3599	CG	ARG	A	470	4.333	20.884	63.505	1.00	47.41	AAAA
ATOM	3600	CD	ARG	A	470	5.638	20.541	64.154	1.00	48.55	AAAA
ATOM	3601	NE	ARG	A	470	5.389	20.106	65.519	1.00	52.65	AAAA
ATOM	3602	CZ	ARG	A	470	6.295	20.118	66.486	1.00	54.17	AAAA
ATOM	3603	NH1	ARG	A	470	7.526	20.550	66.237	1.00	54.15	AAAA
ATOM	3604	NH2	ARG	A	470	5.965	19.698	67.700	1.00	55.65	AAAA
ATOM	3605	C	ARG	A	470	3.383	20.156	60.826	1.00	44.03	AAAA
ATOM	3606	O	ARG	A	470	2.236	20.591	60.682	1.00	43.57	AAAA
ATOM	3607	N	GLY	A	471	3.664	18.860	60.856	1.00	44.61	AAAA
ATOM	3608	CA	GLY	A	471	2.616	17.869	60.715	1.00	44.98	AAAA
ATOM	3609	C	GLY	A	471	1.474	18.000	61.701	1.00	46.17	AAAA
ATOM	3610	O	GLY	A	471	1.672	18.166	62.906	1.00	45.23	AAAA
ATOM	3611	N	GLU	A	472	0.260	17.918	61.176	1.00	48.40	AAAA
ATOM	3612	CA	GLU	A	472	-0.928	18.013	62.003	1.00	50.67	AAAA
ATOM	3613	CB	GLU	A	472	-2.165	17.702	61.166	1.00	53.84	AAAA
ATOM	3614	CG	GLU	A	472	-3.380	17.312	61.982	1.00	59.03	AAAA
ATOM	3615	CD	GLU	A	472	-4.469	16.700	61.126	1.00	63.13	AAAA
ATOM	3616	OE1	GLU	A	472	-5.367	16.031	61.693	1.00	65.10	AAAA
ATOM	3617	OE2	GLU	A	472	-4.425	16.892	59.886	1.00	64.02	AAAA
ATOM	3618	C	GLU	A	472	-0.846	17.050	63.186	1.00	49.96	AAAA
ATOM	3619	O	GLU	A	472	-1.019	17.453	64.333	1.00	50.79	AAAA
ATOM	3620	N	ASN	A	473	-0.575	15.780	62.907	1.00	48.62	AAAA
ATOM	3621	CA	ASN	A	473	-0.492	14.783	63.963	1.00	48.39	AAAA
ATOM	3622	CB	ASN	A	473	-0.056	13.431	63.397	1.00	47.07	AAAA
ATOM	3623	CG	ASN	A	473	-1.200	12.691	62.708	1.00	46.40	AAAA
ATOM	3624	OD1	ASN	A	473	-2.310	12.588	63.248	1.00	43.02	AAAA
ATOM	3625	ND2	ASN	A	473	-0.929	12.159	61.522	1.00	44.74	AAAA
ATOM	3626	C	ASN	A	473	0.435	15.193	65.090	1.00	49.66	AAAA
ATOM	3627	O	ASN	A	473	0.094	15.049	66.264	1.00	49.64	AAAA
ATOM	3628	N	SER	A	474	1.607	15.711	64.748	1.00	50.90	AAAA
ATOM	3629	CA	SER	A	474	2.534	16.137	65.783	1.00	50.94	AAAA
ATOM	3630	CB	SER	A	474	3.899	16.465	65.195	1.00	51.45	AAAA
ATOM	3631	OG	SER	A	474	4.770	16.886	66.228	1.00	54.04	AAAA
ATOM	3632	C	SER	A	474	2.007	17.359	66.521	1.00	50.76	AAAA
ATOM	3633	O	SER	A	474	2.227	17.495	67.722	1.00	51.37	AAAA
ATOM	3634	N	CYS	A	475	1.314	18.251	65.816	1.00	49.87	AAAA
ATOM	3635	CA	CYS	A	475	0.783	19.449	66.466	1.00	48.85	AAAA
ATOM	3636	C	CYS	A	475	-0.246	19.052	67.499	1.00	49.66	AAAA
ATOM	3637	O	CYS	A	475	-0.312	19.631	68.583	1.00	49.50	AAAA
ATOM	3638	CB	CYS	A	475	0.130	20.394	65.454	1.00	46.50	AAAA
ATOM	3639	SG	CYS	A	475	1.266	21.133	64.240	1.00	42.41	AAAA
ATOM	3640	N	LYS	A	476	-1.046	18.051	67.148	1.00	52.03	AAAA
ATOM	3641	CA	LYS	A	476	-2.106	17.548	68.022	1.00	52.81	AAAA
ATOM	3642	CB	LYS	A	476	-3.031	16.613	67.227	1.00	55.35	AAAA
ATOM	3643	CG	LYS	A	476	-4.443	16.506	67.785	1.00	61.66	AAAA
ATOM	3644	CD	LYS	A	476	-5.405	15.840	66.796	1.00	65.69	AAAA
ATOM	3645	CE	LYS	A	476	-5.264	14.309	66.744	1.00	68.85	AAAA
ATOM	3646	NZ	LYS	A	476	-5.847	13.598	67.932	1.00	69.54	AAAA
ATOM	3647	O	LYS	A	476	-1.487	16.818	69.210	1.00	50.45	AAAA
ATOM	3648	C	LYS	A	476	-1.892	17.018	70.348	1.00	47.99	AAAA
ATOM	3649	N	ALA	A	477	-0.489	15.986	68.930	1.00	51.12	AAAA
ATOM	3650	CA	ALA	A	477	0.204	15.229	69.963	1.00	51.29	AAAA
ATOM	3651	CB	ALA	A	477	1.275	14.356	69.341	1.00	51.02	AAAA
ATOM	3652	C	ALA	A	477	0.827	16.172	70.975	1.00	52.53	AAAA
ATOM	3653	O	ALA	A	477	0.643	16.004	72.177	1.00	53.87	AAAA
ATOM	3654	N	THR	A	478	1.569	17.162	70.491	1.00	53.47	AAAA
ATOM	3655	CA	THR	A	478	2.200	18.132	71.376	1.00	53.81	AAAA
ATOM	3656	CB	THR	A	478	3.342	18.874	70.669	1.00	54.79	AAAA
ATOM	3657	OG1	THR	A	478	2.842	19.510	69.489	1.00	58.81	AAAA
ATOM	3658	CG2	THR	A	478	4.444	17.908	70.276	1.00	55.30	AAAA
ATOM	3659	C	THR	A	478	1.154	19.141	71.847	1.00	53.50	AAAA
ATOM	3660	O	THR	A	478	1.472	20.154	72.459	1.00	54.64	AAAA
ATOM	3661	N	GLY	A	479	-0.103	18.861	71.539	1.00	52.90	AAAA
ATOM	3662	CA	GLY	A	479	-1.180	19.727	71.981	1.00	53.02	AAAA
ATOM	3663	C	GLY	A	479	-1.159	21.169	71.525	1.00	52.49	AAAA
ATOM	3664	O	GLY	A	479	-1.599	22.064	72.239	1.00	51.83	AAAA
ATOM	3665	N	GLN	A	480	-0.661	21.406	70.326	1.00	52.32	AAAA
ATOM	3666	CA	GLN	A	480	-0.631	22.761	69.824	1.00	51.55	AAAA
ATOM	3667	CB	GLN	A	480	0.693	23.030	69.120	1.00	52.67	AAAA
ATOM	3668	CG	GLN	A	480	1.876	23.030	70.054	1.00	54.54	AAAA
ATOM	3669	CD	GLN	A	480	3.093	23.628	69.405	1.00	56.91	AAAA
ATOM	3670	OE1	GLN	A	480	3.668	23.049	68.485	1.00	58.34	AAAA

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ATOM	3671	NE2	GLN	A	480	3.487	24.808	69.869	1.00	57.83	AAAA
ATOM	3672	C	GLN	A	480	-1.788	23.001	68.877	1.00	50.03	AAAA
ATOM	3673	O	GLN	A	480	-1.647	22.892	67.662	1.00	47.84	AAAA
ATOM	3674	N	VAL	A	481	-2.944	23.317	69.437	1.00	49.57	AAAA
ATOM	3675	CA	VAL	A	481	-4.105	23.581	68.605	1.00	51.29	AAAA
ATOM	3676	CB	VAL	A	481	-5.072	22.377	68.573	1.00	50.90	AAAA
ATOM	3677	CG1	VAL	A	481	-4.349	21.148	68.044	1.00	50.66	AAAA
ATOM	3678	CG2	VAL	A	481	-5.634	22.119	69.961	1.00	50.27	AAAA
ATOM	3679	C	VAL	A	481	-4.846	24.800	69.120	1.00	52.33	AAAA
ATOM	3680	O	VAL	A	481	-4.517	25.338	70.179	1.00	52.12	AAAA
ATOM	3681	N	CYS	A	482	-5.848	25.233	68.366	1.00	53.19	AAAA
ATOM	3682	CA	CYS	A	482	-6.626	26.394	68.750	1.00	53.98	AAAA
ATOM	3683	C	CYS	A	482	-7.256	26.222	70.117	1.00	55.63	AAAA
ATOM	3684	O	CYS	A	482	-7.637	25.124	70.511	1.00	55.98	AAAA
ATOM	3685	CB	CYS	A	482	-7.701	26.675	67.703	1.00	52.65	AAAA
ATOM	3686	SG	CYS	A	482	-7.031	27.238	66.108	1.00	54.26	AAAA
ATOM	3687	N	HIS	A	483	-7.359	27.327	70.839	1.00	59.16	AAAA
ATOM	3688	CA	HIS	A	483	-7.937	27.335	72.173	1.00	63.45	AAAA
ATOM	3689	CB	HIS	A	483	-7.895	28.751	72.733	1.00	65.16	AAAA
ATOM	3690	CG	HIS	A	483	-8.023	28.817	74.218	1.00	66.56	AAAA
ATOM	3691	CD2	HIS	A	483	-8.966	29.381	75.007	1.00	67.48	AAAA
ATOM	3692	ND1	HIS	A	483	-7.082	28.277	75.068	1.00	66.67	AAAA
ATOM	3693	CE1	HIS	A	483	-7.439	28.509	76.318	1.00	67.73	AAAA
ATOM	3694	NE2	HIS	A	483	-8.578	29.177	76.309	1.00	68.45	AAAA
ATOM	3695	C	HIS	A	483	-9.379	26.830	72.169	1.00	65.33	AAAA
ATOM	3696	O	HIS	A	483	-10.006	26.710	71.116	1.00	64.69	AAAA
ATOM	3697	N	ALA	A	484	-9.906	26.554	73.356	1.00	67.96	AAAA
ATOM	3698	CA	ALA	A	484	-11.267	26.052	73.488	1.00	70.13	AAAA
ATOM	3699	CB	ALA	A	484	-11.511	25.593	74.912	1.00	70.69	AAAA
ATOM	3700	C	ALA	A	484	-12.338	27.054	73.080	1.00	72.07	AAAA
ATOM	3701	O	ALA	A	484	-13.415	26.656	72.646	1.00	73.28	AAAA
ATOM	3702	N	LEU	A	485	-12.052	28.345	73.212	1.00	73.71	AAAA
ATOM	3703	CA	LEU	A	485	-13.030	29.375	72.856	1.00	75.69	AAAA
ATOM	3704	CB	LEU	A	485	-12.871	30.596	73.777	1.00	76.53	AAAA
ATOM	3705	CG	LEU	A	485	-13.144	30.446	75.281	1.00	76.48	AAAA
ATOM	3706	CD1	LEU	A	485	-12.062	29.603	75.924	1.00	76.81	AAAA
ATOM	3707	CD2	LEU	A	485	-13.185	31.815	75.930	1.00	75.97	AAAA
ATOM	3708	C	LEU	A	485	-12.906	29.830	71.402	1.00	76.77	AAAA
ATOM	3709	O	LEU	A	485	-12.916	31.030	71.129	1.00	76.32	AAAA
ATOM	3710	N	CYS	A	486	-12.824	28.888	70.464	1.00	78.44	AAAA
ATOM	3711	CA	CYS	A	486	-12.639	29.262	69.062	1.00	79.80	AAAA
ATOM	3712	C	CYS	A	486	-13.323	28.408	68.005	1.00	82.17	AAAA
ATOM	3713	O	CYS	A	486	-12.796	28.240	66.903	1.00	83.24	AAAA
ATOM	3714	CB	CYS	A	486	-11.145	29.290	68.788	1.00	78.19	AAAA
ATOM	3715	SG	CYS	A	486	-10.311	30.096	70.176	1.00	75.70	AAAA
ATOM	3716	N	SER	A	487	-14.503	27.886	68.320	1.00	84.00	AAAA
ATOM	3717	CA	SER	A	487	-15.240	27.062	67.366	1.00	85.78	AAAA
ATOM	3718	CB	SER	A	487	-16.669	26.819	67.874	1.00	87.85	AAAA
ATOM	3719	OG	SER	A	487	-17.382	25.951	67.006	1.00	90.60	AAAA
ATOM	3720	C	SER	A	487	-15.280	27.701	65.966	1.00	84.87	AAAA
ATOM	3721	O	SER	A	487	-15.399	26.995	64.955	1.00	84.74	AAAA
ATOM	3722	N	PRO	A	488	-15.188	29.044	65.890	1.00	83.13	AAAA
ATOM	3723	CD	PRO	A	488	-15.246	30.070	66.946	1.00	82.48	AAAA
ATOM	3724	CA	PRO	A	488	-15.217	29.684	64.574	1.00	81.50	AAAA
ATOM	3725	CB	PRO	A	488	-15.154	31.181	64.910	1.00	82.13	AAAA
ATOM	3726	CG	PRO	A	488	-14.542	31.216	66.290	1.00	83.03	AAAA
ATOM	3727	C	PRO	A	488	-14.115	29.256	63.613	1.00	79.29	AAAA
ATOM	3728	O	PRO	A	488	-13.672	28.105	63.616	1.00	77.71	AAAA
ATOM	3729	N	GLU	A	489	-13.684	30.208	62.792	1.00	77.71	AAAA
ATOM	3730	CA	GLU	A	489	-12.661	29.975	61.786	1.00	75.83	AAAA
ATOM	3731	CB	GLU	A	489	-12.764	31.037	60.683	1.00	77.35	AAAA
ATOM	3732	CG	GLU	A	489	-14.001	30.902	59.798	1.00	78.87	AAAA
ATOM	3733	CD	GLU	A	489	-15.296	30.953	60.582	0.01	79.22	AAAA
ATOM	3734	OE1	GLU	A	489	-15.549	31.976	61.251	0.01	79.62	AAAA
ATOM	3735	OE2	GLU	A	489	-16.064	29.968	60.528	0.01	79.63	AAAA
ATOM	3736	C	GLU	A	489	-11.229	29.915	62.301	1.00	73.13	AAAA
ATOM	3737	O	GLU	A	489	-10.390	30.731	61.918	1.00	74.00	AAAA
ATOM	3738	N	GLY	A	490	-10.959	28.945	63.169	1.00	69.33	AAAA
ATOM	3739	CA	GLY	A	490	-9.617	28.754	63.691	1.00	63.89	AAAA
ATOM	3740	C	GLY	A	490	-8.969	29.845	64.520	1.00	60.11	AAAA
ATOM	3741	O	GLY	A	490	-9.644	30.668	65.145	1.00	60.50	AAAA
ATOM	3742	N	CYS	A	491	-7.637	29.844	64.505	1.00	55.83	AAAA
ATOM	3743	CA	CYS	A	491	-6.835	30.788	65.279	1.00	50.20	AAAA
ATOM	3744	C	CYS	A	491	-5.456	31.020	64.652	1.00	46.10	AAAA
ATOM	3745	O	CYS	A	491	-4.998	30.243	63.823	1.00	45.10	AAAA

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ATOM	3746	CB	CYS	A	491	-6.642	30.222	66.675	1.00	50.92	AAAA
ATOM	3747	SG	CYS	A	491	-5.689	28.673	66.628	1.00	49.59	AAAA
ATOM	3748	N	TRP	A	492	-4.781	32.083	65.066	1.00	41.77	AAAA
ATOM	3749	CA	TRP	A	492	-3.464	32.369	64.530	1.00	38.99	AAAA
ATOM	3750	CB	TRP	A	492	-3.298	33.863	64.292	1.00	36.70	AAAA
ATOM	3751	CG	TRP	A	492	-4.307	34.422	63.360	1.00	36.76	AAAA
ATOM	3752	CD2	TRP	A	492	-4.229	34.444	61.932	1.00	34.87	AAAA
ATOM	3753	CE2	TRP	A	492	-5.373	35.122	61.462	1.00	34.02	AAAA
ATOM	3754	CE3	TRP	A	492	-3.298	33.961	61.003	1.00	35.02	AAAA
ATOM	3755	CD1	TRP	A	492	-5.470	35.056	63.690	1.00	35.06	AAAA
ATOM	3756	NE1	TRP	A	492	-6.113	35.483	62.555	1.00	33.67	AAAA
ATOM	3757	CZ2	TRP	A	492	-5.612	35.333	60.107	1.00	33.91	AAAA
ATOM	3758	CZ3	TRP	A	492	-3.531	34.170	59.660	1.00	35.63	AAAA
ATOM	3759	CH2	TRP	A	492	-4.683	34.855	59.222	1.00	36.22	AAAA
ATOM	3760	C	TRP	A	492	-2.408	31.887	65.501	1.00	39.17	AAAA
ATOM	3761	O	TRP	A	492	-1.211	32.072	65.286	1.00	39.69	AAAA
ATOM	3762	N	GLY	A	493	-2.862	31.269	66.581	1.00	40.06	AAAA
ATOM	3763	CA	GLY	A	493	-1.939	30.767	67.576	1.00	42.62	AAAA
ATOM	3764	C	GLY	A	493	-2.668	30.006	68.657	1.00	43.52	AAAA
ATOM	3765	O	GLY	A	493	-3.878	29.825	68.581	1.00	44.18	AAAA
ATOM	3766	N	PRO	A	494	-1.954	29.546	69.688	1.00	44.51	AAAA
ATOM	3767	CD	PRO	A	494	-0.491	29.639	69.856	1.00	42.34	AAAA
ATOM	3768	CA	PRO	A	494	-2.566	28.791	70.789	1.00	44.19	AAAA
ATOM	3769	CB	PRO	A	494	-1.361	28.149	71.468	1.00	43.24	AAAA
ATOM	3770	CG	PRO	A	494	-0.300	29.203	71.299	1.00	42.64	AAAA
ATOM	3771	C	PRO	A	494	-3.371	29.653	71.752	1.00	43.98	AAAA
ATOM	3772	O	PRO	A	494	-4.287	29.171	72.403	1.00	44.27	AAAA
ATOM	3773	N	GLU	A	495	-3.023	30.933	71.823	1.00	44.64	AAAA
ATOM	3774	CA	GLU	A	495	-3.673	31.882	72.725	1.00	45.02	AAAA
ATOM	3775	CB	GLU	A	495	-2.900	33.212	72.735	1.00	42.24	AAAA
ATOM	3776	CG	GLU	A	495	-1.655	33.244	73.608	1.00	42.51	AAAA
ATOM	3777	CD	GLU	A	495	-0.852	34.525	73.430	1.00	44.08	AAAA
ATOM	3778	OE1	GLU	A	495	-0.182	34.970	74.390	1.00	41.87	AAAA
ATOM	3779	OE2	GLU	A	495	-0.882	35.085	72.312	1.00	47.63	AAAA
ATOM	3780	C	GLU	A	495	-5.149	32.176	72.453	1.00	46.59	AAAA
ATOM	3781	O	GLU	A	495	-5.650	31.988	71.348	1.00	46.06	AAAA
ATOM	3782	N	PRO	A	496	-5.865	32.637	73.488	1.00	49.10	AAAA
ATOM	3783	CD	PRO	A	496	-5.453	32.549	74.903	1.00	48.93	AAAA
ATOM	3784	CA	PRO	A	496	-7.283	32.975	73.389	1.00	50.48	AAAA
ATOM	3785	CB	PRO	A	496	-7.647	33.335	74.827	1.00	50.12	AAAA
ATOM	3786	CG	PRO	A	496	-6.773	32.414	75.615	1.00	49.73	AAAA
ATOM	3787	C	PRO	A	496	-7.485	34.142	72.433	1.00	51.94	AAAA
ATOM	3788	O	PRO	A	496	-8.411	34.134	71.622	1.00	54.25	AAAA
ATOM	3789	N	ARG	A	497	-6.614	35.144	72.542	1.00	52.50	AAAA
ATOM	3790	CA	ARG	A	497	-6.669	36.334	71.691	1.00	53.38	AAAA
ATOM	3791	CB	ARG	A	497	-5.891	37.500	72.313	1.00	56.15	AAAA
ATOM	3792	CG	ARG	A	497	-6.406	38.025	73.638	1.00	57.83	AAAA
ATOM	3793	CD	ARG	A	497	-6.353	36.979	74.735	1.00	61.36	AAAA
ATOM	3794	NE	ARG	A	497	-5.142	36.160	74.709	1.00	63.37	AAAA
ATOM	3795	CZ	ARG	A	497	-4.773	35.353	75.703	1.00	66.12	AAAA
ATOM	3796	NH1	ARG	A	497	-5.513	35.260	76.806	1.00	65.74	AAAA
ATOM	3797	NH2	ARG	A	497	-3.673	34.622	75.595	1.00	67.11	AAAA
ATOM	3798	C	ARG	A	497	-6.040	36.025	70.340	1.00	52.89	AAAA
ATOM	3799	O	ARG	A	497	-5.844	36.924	69.524	1.00	52.41	AAAA
ATOM	3800	N	ASP	A	498	-5.702	34.757	70.126	1.00	51.94	AAAA
ATOM	3801	CA	ASP	A	498	-5.095	34.309	68.874	1.00	52.16	AAAA
ATOM	3802	CB	ASP	A	498	-4.115	33.156	69.133	1.00	47.03	AAAA
ATOM	3803	CG	ASP	A	498	-2.701	33.627	69.284	1.00	40.75	AAAA
ATOM	3804	OD1	ASP	A	498	-1.859	32.845	69.765	1.00	36.52	AAAA
ATOM	3805	OD2	ASP	A	498	-2.438	34.786	68.914	1.00	38.87	AAAA
ATOM	3806	C	ASP	A	498	-6.177	33.818	67.937	1.00	53.93	AAAA
ATOM	3807	O	ASP	A	498	-5.932	33.545	66.766	1.00	54.12	AAAA
ATOM	3808	N	CYS	A	499	-7.381	33.713	68.470	1.00	57.04	AAAA
ATOM	3809	CA	CYS	A	499	-8.504	33.211	67.712	1.00	61.67	AAAA
ATOM	3810	C	CYS	A	499	-9.175	34.184	66.772	1.00	62.09	AAAA
ATOM	3811	O	CYS	A	499	-9.389	35.345	67.105	1.00	63.39	AAAA
ATOM	3812	CB	CYS	A	499	-9.499	32.598	68.689	1.00	65.33	AAAA
ATOM	3813	SG	CYS	A	499	-8.780	31.039	69.292	1.00	73.60	AAAA
ATOM	3814	N	VAL	A	500	-9.484	33.696	65.578	1.00	61.78	AAAA
ATOM	3815	CA	VAL	A	500	-10.138	34.504	64.571	1.00	62.09	AAAA
ATOM	3816	CB	VAL	A	500	-10.249	33.729	63.251	1.00	63.03	AAAA
ATOM	3817	CG1	VAL	A	500	-10.957	34.574	62.214	1.00	64.20	AAAA
ATOM	3818	CG2	VAL	A	500	-8.866	33.340	62.763	1.00	63.38	AAAA
ATOM	3819	C	VAL	A	500	-11.540	34.884	65.041	1.00	62.11	AAAA
ATOM	3820	OT1	VAL	A	500	-12.195	34.047	65.701	1.00	61.39	AAAA

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ATOM	3821	OT2	VAL	A	500	-11.970	36.014	64.727	1.00	62.41	AAAA
ATOM	3822	CB	ALA	B	1	2.356	84.880	26.319	1.00	90.90	BBBB
ATOM	3823	C	ALA	B	1	0.031	85.787	26.110	1.00	91.58	BBBB
ATOM	3824	O	ALA	B	1	-0.298	85.022	25.200	1.00	91.94	BBBB
ATOM	3825	N	ALA	B	1	0.707	84.414	28.099	1.00	91.42	BBBB
ATOM	3826	CA	ALA	B	1	1.147	85.414	27.087	1.00	91.47	BBBB
ATOM	3827	N	ALA	B	2	-0.553	86.965	26.321	1.00	91.00	BBBB
ATOM	3828	CA	ALA	B	2	-1.608	87.499	25.462	1.00	89.73	BBBB
ATOM	3829	CB	ALA	B	2	-2.836	87.854	26.290	1.00	90.47	BBBB
ATOM	3830	C	ALA	B	2	-0.998	88.753	24.838	1.00	88.30	BBBB
ATOM	3831	O	ALA	B	2	-0.641	89.695	25.547	1.00	89.08	BBBB
ATOM	3832	N	GLU	B	3	-0.884	88.772	23.515	1.00	85.94	BBBB
ATOM	3833	CA	GLU	B	3	-0.252	89.900	22.836	1.00	83.78	BBBB
ATOM	3834	CB	GLU	B	3	0.822	89.362	21.896	1.00	83.83	BBBB
ATOM	3835	CG	GLU	B	3	0.273	88.409	20.851	1.00	83.17	BBBB
ATOM	3836	CD	GLU	B	3	1.346	87.907	19.912	1.00	84.43	BBBB
ATOM	3837	OE1	GLU	B	3	2.226	87.144	20.370	1.00	84.00	BBBB
ATOM	3838	OE2	GLU	B	3	1.315	88.284	18.718	1.00	84.38	BBBB
ATOM	3839	C	GLU	B	3	-1.137	90.874	22.055	1.00	81.60	BBBB
ATOM	3840	O	GLU	B	3	-0.618	91.689	21.287	1.00	82.79	BBBB
ATOM	3841	N	LYS	B	4	-2.451	90.816	22.240	1.00	77.32	BBBB
ATOM	3842	CA	LYS	B	4	-3.318	91.712	21.489	1.00	72.24	BBBB
ATOM	3843	CB	LYS	B	4	-3.911	90.960	20.299	1.00	72.99	BBBB
ATOM	3844	CG	LYS	B	4	-2.862	90.578	19.251	1.00	73.87	BBBB
ATOM	3845	CD	LYS	B	4	-3.442	89.706	18.144	1.00	75.12	BBBB
ATOM	3846	CE	LYS	B	4	-3.982	88.392	18.697	1.00	76.54	BBBB
ATOM	3847	NZ	LYS	B	4	-4.525	87.499	17.636	1.00	77.09	BBBB
ATOM	3848	C	LYS	B	4	-4.416	92.372	22.306	1.00	68.72	BBBB
ATOM	3849	O	LYS	B	4	-5.056	91.741	23.138	1.00	69.23	BBBB
ATOM	3850	N	LYS	B	5	-4.620	93.658	22.054	1.00	64.66	BBBB
ATOM	3851	CA	LYS	B	5	-5.625	94.444	22.756	1.00	61.66	BBBB
ATOM	3852	CB	LYS	B	5	-5.469	95.922	22.390	1.00	64.44	BBBB
ATOM	3853	CG	LYS	B	5	-6.446	96.833	23.109	1.00	67.43	BBBB
ATOM	3854	CD	LYS	B	5	-6.038	98.293	22.999	1.00	70.43	BBBB
ATOM	3855	CE	LYS	B	5	-6.941	99.148	23.868	1.00	71.94	BBBB
ATOM	3856	NZ	LYS	B	5	-7.042	98.568	25.241	1.00	73.42	BBBB
ATOM	3857	C	LYS	B	5	-7.035	93.977	22.434	1.00	57.43	BBBB
ATOM	3858	O	LYS	B	5	-7.412	93.870	21.268	1.00	59.14	BBBB
ATOM	3859	N	VAL	B	6	-7.825	93.710	23.463	1.00	52.04	BBBB
ATOM	3860	CA	VAL	B	6	-9.183	93.238	23.232	1.00	48.54	BBBB
ATOM	3861	CB	VAL	B	6	-9.541	92.103	24.182	1.00	47.62	BBBB
ATOM	3862	CG1	VAL	B	6	-8.584	90.944	23.995	1.00	45.73	BBBB
ATOM	3863	CG2	VAL	B	6	-9.509	92.614	25.597	1.00	48.12	BBBB
ATOM	3864	C	VAL	B	6	-10.255	94.303	23.383	1.00	46.10	BBBB
ATOM	3865	O	VAL	B	6	-9.968	95.448	23.716	1.00	46.24	BBBB
ATOM	3866	N	CYS	B	7	-11.493	93.907	23.105	1.00	43.45	BBBB
ATOM	3867	CA	CYS	B	7	-12.653	94.781	23.238	1.00	41.48	BBBB
ATOM	3868	C	CYS	B	7	-13.889	93.897	23.150	1.00	39.94	BBBB
ATOM	3869	O	CYS	B	7	-13.808	92.760	22.699	1.00	38.56	BBBB
ATOM	3870	CB	CYS	B	7	-12.657	95.898	22.185	1.00	41.32	BBBB
ATOM	3871	SG	CYS	B	7	-12.948	95.421	20.459	1.00	43.73	BBBB
ATOM	3872	N	GLN	B	8	-15.024	94.413	23.598	1.00	40.09	BBBB
ATOM	3873	CA	GLN	B	8	-16.246	93.628	23.654	1.00	41.25	BBBB
ATOM	3874	CB	GLN	B	8	-17.209	94.267	24.651	1.00	40.11	BBBB
ATOM	3875	CG	GLN	B	8	-16.693	94.270	26.056	1.00	42.88	BBBB
ATOM	3876	CD	GLN	B	8	-16.398	92.874	26.573	1.00	42.83	BBBB
ATOM	3877	OE1	GLN	B	8	-15.395	92.657	27.259	1.00	44.92	BBBB
ATOM	3878	NE2	GLN	B	8	-17.273	91.924	26.262	1.00	41.48	BBBB
ATOM	3879	C	GLN	B	8	-17.022	93.290	22.395	1.00	42.13	BBBB
ATOM	3880	O	GLN	B	8	-17.513	92.167	22.255	1.00	43.46	BBBB
ATOM	3881	N	GLY	B	9	-17.152	94.242	21.484	1.00	41.65	BBBB
ATOM	3882	CA	GLY	B	9	-17.940	93.963	20.303	1.00	42.09	BBBB
ATOM	3883	C	GLY	B	9	-19.393	94.263	20.640	1.00	40.98	BBBB
ATOM	3884	O	GLY	B	9	-19.746	94.475	21.803	1.00	40.38	BBBB
ATOM	3885	N	THR	B	10	-20.257	94.265	19.637	1.00	39.50	BBBB
ATOM	3886	CA	THR	B	10	-21.649	94.586	19.894	1.00	38.24	BBBB
ATOM	3887	CB	THR	B	10	-22.022	95.917	19.206	1.00	36.02	BBBB
ATOM	3888	OG1	THR	B	10	-21.821	95.804	17.789	1.00	33.39	BBBB
ATOM	3889	CG2	THR	B	10	-21.150	97.038	19.745	1.00	34.56	BBBB
ATOM	3890	C	THR	B	10	-22.638	93.514	19.476	1.00	38.14	BBBB
ATOM	3891	O	THR	B	10	-22.284	92.540	18.827	1.00	38.54	BBBB
ATOM	3892	N	SER	B	11	-23.889	93.714	19.863	1.00	40.30	BBBB
ATOM	3893	CA	SER	B	11	-24.953	92.784	19.539	1.00	42.90	BBBB
ATOM	3894	CB	SER	B	11	-25.189	91.856	20.724	1.00	42.83	BBBB
ATOM	3895	OG	SER	B	11	-24.008	91.129	21.004	1.00	46.78	BBBB

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ATOM	3896	C	SER	B	11	-26.223	93.555	19.202	1.00	43.13	BBBB
ATOM	3897	O	SER	B	11	-27.323	93.172	19.605	1.00	42.23	BBBB
ATOM	3898	N	ASN	B	12	-26.052	94.645	18.456	1.00	43.57	BBBB
ATOM	3899	CA	ASN	B	12	-27.171	95.496	18.053	1.00	43.71	BBBB
ATOM	3900	CB	ASN	B	12	-26.711	96.939	17.822	1.00	42.07	BBBB
ATOM	3901	CG	ASN	B	12	-25.968	97.526	19.001	1.00	40.92	BBBB
ATOM	3902	OD1	ASN	B	12	-26.365	97.364	20.150	1.00	42.25	BBBB
ATOM	3903	ND2	ASN	B	12	-24.896	98.243	18.714	1.00	39.62	BBBB
ATOM	3904	C	ASN	B	12	-27.824	95.016	16.763	1.00	43.38	BBBB
ATOM	3905	O	ASN	B	12	-28.927	95.437	16.448	1.00	43.72	BBBB
ATOM	3906	N	LYS	B	13	-27.139	94.144	16.025	1.00	44.04	BBBB
ATOM	3907	CA	LYS	B	13	-27.631	93.641	14.742	1.00	43.22	BBBB
ATOM	3908	CB	LYS	B	13	-28.819	92.695	14.940	1.00	43.54	BBBB
ATOM	3909	CG	LYS	B	13	-28.427	91.391	15.613	1.00	45.56	BBBB
ATOM	3910	CD	LYS	B	13	-29.413	90.266	15.363	1.00	47.22	BBBB
ATOM	3911	CE	LYS	B	13	-30.803	90.593	15.880	1.00	50.74	BBBB
ATOM	3912	NZ	LYS	B	13	-31.803	89.517	15.568	1.00	51.41	BBBB
ATOM	3913	C	LYS	B	13	-28.009	94.806	13.822	1.00	43.34	BBBB
ATOM	3914	O	LYS	B	13	-27.208	95.723	13.642	1.00	43.03	BBBB
ATOM	3915	N	LEU	B	14	-29.220	94.797	13.263	1.00	41.94	BBBB
ATOM	3916	CA	LEU	B	14	-29.633	95.864	12.341	1.00	41.86	BBBB
ATOM	3917	CB	LEU	B	14	-30.586	95.304	11.281	1.00	40.14	BBBB
ATOM	3918	CG	LEU	B	14	-29.957	94.207	10.417	1.00	40.38	BBBB
ATOM	3919	CD1	LEU	B	14	-30.970	93.663	9.413	1.00	38.53	BBBB
ATOM	3920	CD2	LEU	B	14	-28.737	94.771	9.715	1.00	36.18	BBBB
ATOM	3921	C	LEU	B	14	-30.252	97.113	12.968	1.00	41.82	BBBB
ATOM	3922	O	LEU	B	14	-30.853	97.929	12.269	1.00	39.90	BBBB
ATOM	3923	N	THR	B	15	-30.096	97.255	14.283	1.00	42.58	BBBB
ATOM	3924	CA	THR	B	15	-30.610	98.399	15.023	1.00	41.03	BBBB
ATOM	3925	CB	THR	B	15	-30.754	98.051	16.507	1.00	41.85	BBBB
ATOM	3926	OG1	THR	B	15	-31.888	97.187	16.675	1.00	40.77	BBBB
ATOM	3927	CG2	THR	B	15	-30.912	99.312	17.361	1.00	40.86	BBBB
ATOM	3928	C	THR	B	15	-29.647	99.563	14.857	1.00	42.13	BBBB
ATOM	3929	O	THR	B	15	-28.449	99.357	14.691	1.00	43.13	BBBB
ATOM	3930	N	GLN	B	16	-30.177	100.783	14.870	1.00	42.66	BBBB
ATOM	3931	CA	GLN	B	16	-29.361	101.993	14.720	1.00	41.57	BBBB
ATOM	3932	CB	GLN	B	16	-29.899	102.861	13.571	1.00	43.23	BBBB
ATOM	3933	CG	GLN	B	16	-29.071	104.114	13.277	1.00	46.65	BBBB
ATOM	3934	CD	GLN	B	16	-29.635	104.973	12.145	1.00	47.38	BBBB
ATOM	3935	OE1	GLN	B	16	-29.855	104.496	11.024	1.00	47.43	BBBB
ATOM	3936	NE2	GLN	B	16	-29.854	106.252	12.434	1.00	48.11	BBBB
ATOM	3937	C	GLN	B	16	-29.451	102.752	16.038	1.00	40.64	BBBB
ATOM	3938	O	GLN	B	16	-30.535	102.875	16.614	1.00	38.94	BBBB
ATOM	3939	N	LEU	B	17	-28.316	103.249	16.519	1.00	39.42	BBBB
ATOM	3940	CA	LEU	B	17	-28.291	103.968	17.792	1.00	37.94	BBBB
ATOM	3941	CB	LEU	B	17	-26.989	103.680	18.547	1.00	36.82	BBBB
ATOM	3942	CG	LEU	B	17	-26.640	102.201	18.730	1.00	36.84	BBBB
ATOM	3943	CD1	LEU	B	17	-25.245	102.071	19.311	1.00	33.71	BBBB
ATOM	3944	CD2	LEU	B	17	-27.682	101.530	19.618	1.00	35.84	BBBB
ATOM	3945	C	LEU	B	17	-28.438	105.458	17.589	1.00	38.60	BBBB
ATOM	3946	O	LEU	B	17	-27.447	106.191	17.498	1.00	39.67	BBBB
ATOM	3947	N	GLY	B	18	-29.685	105.905	17.527	1.00	39.18	BBBB
ATOM	3948	CA	GLY	B	18	-29.940	107.314	17.332	1.00	39.86	BBBB
ATOM	3949	C	GLY	B	18	-29.626	107.794	15.927	1.00	41.02	BBBB
ATOM	3950	O	GLY	B	18	-29.896	107.122	14.937	1.00	41.92	BBBB
ATOM	3951	N	THR	B	19	-29.036	108.972	15.837	1.00	41.79	BBBB
ATOM	3952	CA	THR	B	19	-28.723	109.542	14.545	1.00	42.40	BBBB
ATOM	3953	CB	THR	B	19	-28.554	111.058	14.653	1.00	41.93	BBBB
ATOM	3954	OG1	THR	B	19	-27.291	111.341	15.264	1.00	43.77	BBBB
ATOM	3955	CG2	THR	B	19	-29.672	111.669	15.489	1.00	38.52	BBBB
ATOM	3956	C	THR	B	19	-27.434	108.979	13.980	1.00	43.76	BBBB
ATOM	3957	O	THR	B	19	-26.528	108.640	14.734	1.00	45.17	BBBB
ATOM	3958	N	PHE	B	20	-27.351	108.896	12.655	1.00	43.80	BBBB
ATOM	3959	CA	PHE	B	20	-26.150	108.410	12.000	1.00	44.93	BBBB
ATOM	3960	CB	PHE	B	20	-26.119	108.894	10.552	1.00	44.54	BBBB
ATOM	3961	CG	PHE	B	20	-27.127	108.232	9.674	1.00	48.17	BBBB
ATOM	3962	CD1	PHE	B	20	-27.421	108.753	8.420	1.00	49.08	BBBB
ATOM	3963	CD2	PHE	B	20	-27.776	107.067	10.084	1.00	50.85	BBBB
ATOM	3964	CE1	PHE	B	20	-28.348	108.124	7.583	1.00	49.60	BBBB
ATOM	3965	CE2	PHE	B	20	-28.710	106.426	9.248	1.00	50.80	BBBB
ATOM	3966	CZ	PHE	B	20	-28.992	106.958	7.998	1.00	50.22	BBBB
ATOM	3967	C	PHE	B	20	-24.923	108.946	12.736	1.00	46.44	BBBB
ATOM	3968	O	PHE	B	20	-23.946	108.234	12.960	1.00	45.53	BBBB
ATOM	3969	N	GLU	B	21	-24.997	110.216	13.114	1.00	47.75	BBBB
ATOM	3970	CA	GLU	B	21	-23.916	110.888	13.819	1.00	48.05	BBBB

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ATOM	3971	CB	GLU	B	21	-24.316	112.344	14.052	1.00	50.22	BBBB
ATOM	3972	CG	GLU	B	21	-23.362	113.119	14.918	1.00	56.93	BBBB
ATOM	3973	CD	GLU	B	21	-21.962	113.142	14.357	1.00	60.75	BBBB
ATOM	3974	OE1	GLU	B	21	-21.759	113.743	13.279	1.00	63.46	BBBB
ATOM	3975	OE2	GLU	B	21	-21.065	112.553	14.997	1.00	63.81	BBBB
ATOM	3976	C	GLU	B	21	-23.587	110.195	15.151	1.00	46.79	BBBB
ATOM	3977	O	GLU	B	21	-22.411	109.978	15.487	1.00	44.64	BBBB
ATOM	3978	N	ASP	B	22	-24.627	109.854	15.907	1.00	43.16	BBBB
ATOM	3979	CA	ASP	B	22	-24.432	109.186	17.183	1.00	42.09	BBBB
ATOM	3980	CB	ASP	B	22	-25.743	109.110	17.972	1.00	42.09	BBBB
ATOM	3981	CG	ASP	B	22	-26.256	110.474	18.417	1.00	41.65	BBBB
ATOM	3982	OD1	ASP	B	22	-25.440	111.405	18.623	1.00	39.38	BBBB
ATOM	3983	OD2	ASP	B	22	-27.489	110.597	18.581	1.00	41.03	BBBB
ATOM	3984	C	ASP	B	22	-23.920	107.774	16.942	1.00	41.75	BBBB
ATOM	3985	O	ASP	B	22	-22.891	107.372	17.481	1.00	42.53	BBBB
ATOM	3986	N	HIS	B	23	-24.664	107.031	16.126	1.00	40.02	BBBB
ATOM	3987	CA	HIS	B	23	-24.348	105.651	15.767	1.00	35.97	BBBB
ATOM	3988	CB	HIS	B	23	-25.155	105.253	14.539	1.00	32.17	BBBB
ATOM	3989	CG	HIS	B	23	-25.082	103.800	14.204	1.00	29.25	BBBB
ATOM	3990	CD2	HIS	B	23	-24.335	103.134	13.291	1.00	26.48	BBBB
ATOM	3991	ND1	HIS	B	23	-25.865	102.850	14.830	1.00	27.89	BBBB
ATOM	3992	CE1	HIS	B	23	-25.605	101.662	14.313	1.00	25.95	BBBB
ATOM	3993	NE2	HIS	B	23	-24.683	101.806	13.377	1.00	24.80	BBBB
ATOM	3994	C	HIS	B	23	-22.865	105.493	15.470	1.00	35.48	BBBB
ATOM	3995	O	HIS	B	23	-22.209	104.578	15.963	1.00	36.22	BBBB
ATOM	3996	N	PHE	B	24	-22.338	106.393	14.660	1.00	33.83	BBBB
ATOM	3997	CA	PHE	B	24	-20.936	106.343	14.317	1.00	33.95	BBBB
ATOM	3998	CB	PHE	B	24	-20.585	107.509	13.408	1.00	31.60	BBBB
ATOM	3999	CG	PHE	B	24	-19.169	107.509	12.967	1.00	31.48	BBBB
ATOM	4000	CD1	PHE	B	24	-18.724	106.585	12.040	1.00	32.42	BBBB
ATOM	4001	CD2	PHE	B	24	-18.264	108.409	13.503	1.00	32.77	BBBB
ATOM	4002	CE1	PHE	B	24	-17.395	106.564	11.660	1.00	32.76	BBBB
ATOM	4003	CE2	PHE	B	24	-16.937	108.395	13.129	1.00	30.70	BBBB
ATOM	4004	CZ	PHE	B	24	-16.502	107.473	12.208	1.00	32.62	BBBB
ATOM	4005	C	PHE	B	24	-20.079	106.401	15.585	1.00	36.44	BBBB
ATOM	4006	O	PHE	B	24	-19.222	105.544	15.793	1.00	37.29	BBBB
ATOM	4007	N	LEU	B	25	-20.312	107.406	16.433	1.00	38.09	BBBB
ATOM	4008	CA	LEU	B	25	-19.545	107.553	17.666	1.00	38.16	BBBB
ATOM	4009	CB	LEU	B	25	-20.116	108.664	18.542	1.00	39.22	BBBB
ATOM	4010	CG	LEU	B	25	-20.033	110.117	18.061	1.00	41.57	BBBB
ATOM	4011	CD1	LEU	B	25	-20.345	111.002	19.259	1.00	42.04	BBBB
ATOM	4012	CD2	LEU	B	25	-18.663	110.460	17.489	1.00	39.07	BBBB
ATOM	4013	C	LEU	B	25	-19.477	106.262	18.476	1.00	38.99	BBBB
ATOM	4014	O	LEU	B	25	-18.392	105.835	18.861	1.00	40.64	BBBB
ATOM	4015	N	SER	B	26	-20.622	105.642	18.744	1.00	37.60	BBBB
ATOM	4016	CA	SER	B	26	-20.618	104.393	19.483	1.00	35.65	BBBB
ATOM	4017	CB	SER	B	26	-22.004	103.775	19.505	1.00	33.47	BBBB
ATOM	4018	OG	SER	B	26	-22.804	104.368	20.502	1.00	38.66	BBBB
ATOM	4019	C	SER	B	26	-19.661	103.446	18.787	1.00	36.61	BBBB
ATOM	4020	O	SER	B	26	-18.759	102.884	19.397	1.00	40.67	BBBB
ATOM	4021	N	LEU	B	27	-19.858	103.270	17.495	1.00	35.83	BBBB
ATOM	4022	CA	LEU	B	27	-19.005	102.390	16.733	1.00	35.99	BBBB
ATOM	4023	CB	LEU	B	27	-19.335	102.514	15.249	1.00	37.08	BBBB
ATOM	4024	CG	LEU	B	27	-18.673	101.496	14.331	1.00	38.26	BBBB
ATOM	4025	CD1	LEU	B	27	-19.318	100.122	14.546	1.00	38.45	BBBB
ATOM	4026	CD2	LEU	B	27	-18.826	101.951	12.893	1.00	38.73	BBBB
ATOM	4027	C	LEU	B	27	-17.552	102.780	16.965	1.00	35.66	BBBB
ATOM	4028	O	LEU	B	27	-16.724	101.962	17.338	1.00	31.82	BBBB
ATOM	4029	N	GLN	B	28	-17.257	104.052	16.737	1.00	36.80	BBBB
ATOM	4030	CA	GLN	B	28	-15.903	104.562	16.896	1.00	36.95	BBBB
ATOM	4031	CB	GLN	B	28	-15.856	106.022	16.490	1.00	34.36	BBBB
ATOM	4032	CG	GLN	B	28	-14.566	106.728	16.816	1.00	32.46	BBBB
ATOM	4033	CD	GLN	B	28	-14.584	108.165	16.322	1.00	31.63	BBBB
ATOM	4034	OE1	GLN	B	28	-13.968	108.493	15.306	1.00	29.80	BBBB
ATOM	4035	NE2	GLN	B	28	-15.309	109.026	17.031	1.00	27.20	BBBB
ATOM	4036	C	GLN	B	28	-15.377	104.414	18.306	1.00	37.66	BBBB
ATOM	4037	O	GLN	B	28	-14.186	104.233	18.505	1.00	38.45	BBBB
ATOM	4038	N	ARG	B	29	-16.271	104.480	19.280	1.00	37.29	BBBB
ATOM	4039	CA	ARG	B	29	-15.882	104.379	20.672	1.00	38.34	BBBB
ATOM	4040	CB	ARG	B	29	-16.972	104.981	21.555	1.00	38.90	BBBB
ATOM	4041	CG	ARG	B	29	-16.580	105.142	23.014	1.00	43.54	BBBB
ATOM	4042	CD	ARG	B	29	-17.592	105.977	23.766	1.00	46.43	BBBB
ATOM	4043	NE	ARG	B	29	-18.958	105.558	23.464	1.00	52.49	BBBB
ATOM	4044	CZ	ARG	B	29	-19.890	106.367	22.963	1.00	54.17	BBBB
ATOM	4045	NH1	ARG	B	29	-19.591	107.642	22.716	1.00	52.51	BBBB

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ATOM	4046	NH2	ARG	B	29	-21.112	105.901	22.695	1.00	52.94	BBBB
ATOM	4047	C	ARG	B	29	-15.633	102.945	21.085	1.00	39.54	BBBB
ATOM	4048	O	ARG	B	29	-14.671	102.647	21.788	1.00	40.79	BBBB
ATOM	4049	N	MET	B	30	-16.514	102.060	20.649	1.00	39.69	BBBB
ATOM	4050	CA	MET	B	30	-16.414	100.662	20.986	1.00	39.12	BBBB
ATOM	4051	CB	MET	B	30	-17.738	99.957	20.645	1.00	37.04	BBBB
ATOM	4052	CG	MET	B	30	-18.961	100.425	21.480	1.00	38.69	BBBB
ATOM	4053	SD	MET	B	30	-19.041	99.845	23.234	1.00	41.58	BBBB
ATOM	4054	CE	MET	B	30	-20.471	100.685	23.926	1.00	23.68	BBBB
ATOM	4055	C	MET	B	30	-15.239	99.930	20.332	1.00	41.38	BBBB
ATOM	4056	O	MET	B	30	-14.800	98.898	20.845	1.00	43.31	BBBB
ATOM	4057	N	PHE	B	31	-14.696	100.455	19.237	1.00	41.41	BBBB
ATOM	4058	CA	PHE	B	31	-13.619	99.744	18.556	1.00	42.44	BBBB
ATOM	4059	CB	PHE	B	31	-14.099	99.283	17.182	1.00	39.20	BBBB
ATOM	4060	CG	PHE	B	31	-15.237	98.316	17.230	1.00	38.33	BBBB
ATOM	4061	CD1	PHE	B	31	-15.065	97.042	17.762	1.00	39.32	BBBB
ATOM	4062	CD2	PHE	B	31	-16.488	98.675	16.749	1.00	37.53	BBBB
ATOM	4063	CE1	PHE	B	31	-16.135	96.134	17.812	1.00	38.49	BBBB
ATOM	4064	CE2	PHE	B	31	-17.559	97.784	16.793	1.00	37.20	BBBB
ATOM	4065	CZ	PHE	B	31	-17.384	96.511	17.323	1.00	37.73	BBBB
ATOM	4066	C	PHE	B	31	-12.301	100.472	18.370	1.00	46.06	BBBB
ATOM	4067	O	PHE	B	31	-11.331	99.862	17.932	1.00	48.39	BBBB
ATOM	4068	N	ASN	B	32	-12.261	101.753	18.717	1.00	49.05	BBBB
ATOM	4069	CA	ASN	B	32	-11.083	102.598	18.538	1.00	53.10	BBBB
ATOM	4070	CB	ASN	B	32	-11.065	103.703	19.591	1.00	58.64	BBBB
ATOM	4071	CG	ASN	B	32	-10.270	104.902	19.135	1.00	65.70	BBBB
ATOM	4072	OD1	ASN	B	32	-9.917	104.991	17.962	1.00	64.39	BBBB
ATOM	4073	ND2	ASN	B	32	-9.987	105.830	20.040	1.00	74.16	BBBB
ATOM	4074	C	ASN	B	32	-9.681	101.983	18.443	1.00	54.12	BBBB
ATOM	4075	O	ASN	B	32	-9.015	102.100	17.404	1.00	55.49	BBBB
ATOM	4076	N	ASN	B	33	-9.206	101.342	19.501	1.00	52.60	BBBB
ATOM	4077	CA	ASN	B	33	-7.865	100.775	19.435	1.00	51.90	BBBB
ATOM	4078	CB	ASN	B	33	-7.013	101.348	20.562	1.00	52.79	BBBB
ATOM	4079	CG	ASN	B	33	-6.780	102.827	20.402	1.00	53.95	BBBB
ATOM	4080	OD1	ASN	B	33	-6.101	103.259	19.471	1.00	54.94	BBBB
ATOM	4081	ND2	ASN	B	33	-7.358	103.619	21.296	1.00	55.46	BBBB
ATOM	4082	C	ASN	B	33	-7.897	99.273	19.518	1.00	50.72	BBBB
ATOM	4083	O	ASN	B	33	-6.905	98.629	19.843	1.00	51.51	BBBB
ATOM	4084	N	CYS	B	34	-9.049	98.720	19.184	1.00	48.69	BBBB
ATOM	4085	CA	CYS	B	34	-9.263	97.294	19.258	1.00	45.55	BBBB
ATOM	4086	C	CYS	B	34	-8.500	96.410	18.275	1.00	45.94	BBBB
ATOM	4087	O	CYS	B	34	-8.314	96.752	17.101	1.00	45.61	BBBB
ATOM	4088	CB	CYS	B	34	-10.747	97.018	19.135	1.00	44.63	BBBB
ATOM	4089	SG	CYS	B	34	-11.101	95.338	19.650	1.00	40.13	BBBB
ATOM	4090	N	GLU	B	35	-8.074	95.252	18.774	1.00	45.35	BBBB
ATOM	4091	CA	GLU	B	35	-7.337	94.281	17.981	1.00	44.66	BBBB
ATOM	4092	CB	GLU	B	35	-5.940	94.087	18.544	1.00	47.83	BBBB
ATOM	4093	CG	GLU	B	35	-5.117	95.338	18.513	1.00	52.49	BBBB
ATOM	4094	CD	GLU	B	35	-3.655	95.034	18.578	1.00	56.31	BBBB
ATOM	4095	OE1	GLU	B	35	-3.216	94.481	19.610	1.00	58.59	BBBB
ATOM	4096	OE2	GLU	B	35	-2.950	95.341	17.588	1.00	59.17	BBBB
ATOM	4097	C	GLU	B	35	-8.057	92.954	17.973	1.00	43.07	BBBB
ATOM	4098	O	GLU	B	35	-8.018	92.226	16.977	1.00	42.40	BBBB
ATOM	4099	N	VAL	B	36	-8.700	92.635	19.091	1.00	40.14	BBBB
ATOM	4100	CA	VAL	B	36	-9.455	91.395	19.180	1.00	39.73	BBBB
ATOM	4101	CB	VAL	B	36	-8.748	90.347	20.072	1.00	39.54	BBBB
ATOM	4102	CG1	VAL	B	36	-9.582	89.080	20.148	1.00	36.59	BBBB
ATOM	4103	CG2	VAL	B	36	-7.405	90.018	19.494	1.00	38.89	BBBB
ATOM	4104	C	VAL	B	36	-10.852	91.653	19.729	1.00	38.88	BBBB
ATOM	4105	O	VAL	B	36	-11.031	92.072	20.872	1.00	37.66	BBBB
ATOM	4106	N	VAL	B	37	-11.849	91.401	18.896	1.00	38.66	BBBB
ATOM	4107	CA	VAL	B	37	-13.228	91.605	19.301	1.00	37.75	BBBB
ATOM	4108	CB	VAL	B	37	-14.123	91.930	18.077	1.00	35.91	BBBB
ATOM	4109	CG1	VAL	B	37	-15.531	92.242	18.529	1.00	35.93	BBBB
ATOM	4110	CG2	VAL	B	37	-13.545	93.095	17.317	1.00	32.75	BBBB
ATOM	4111	C	VAL	B	37	-13.694	90.317	19.946	1.00	37.33	BBBB
ATOM	4112	O	VAL	B	37	-13.754	89.278	19.291	1.00	39.25	BBBB
ATOM	4113	N	LEU	B	38	-14.012	90.373	21.230	1.00	37.26	BBBB
ATOM	4114	CA	LEU	B	38	-14.463	89.175	21.920	1.00	39.55	BBBB
ATOM	4115	CB	LEU	B	38	-14.506	89.407	23.429	1.00	40.70	BBBB
ATOM	4116	CG	LEU	B	38	-13.128	89.621	24.063	1.00	43.38	BBBB
ATOM	4117	CD1	LEU	B	38	-13.298	89.740	25.562	1.00	43.27	BBBB
ATOM	4118	CD2	LEU	B	38	-12.191	88.476	23.717	1.00	39.35	BBBB
ATOM	4119	C	LEU	B	38	-15.829	88.741	21.436	1.00	39.47	BBBB
ATOM	4120	O	LEU	B	38	-16.181	87.557	21.506	1.00	40.38	BBBB

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ATOM	4121	N	GLY	B	39	-16.601	89.707	20.951	1.00	38.39	BBBB
ATOM	4122	CA	GLY	B	39	-17.928	89.406	20.453	1.00	35.96	BBBB
ATOM	4123	C	GLY	B	39	-18.049	89.627	18.958	1.00	36.48	BBBB
ATOM	4124	O	GLY	B	39	-17.191	89.205	18.173	1.00	34.99	BBBB
ATOM	4125	N	ASN	B	40	-19.110	90.328	18.569	1.00	35.01	BBBB
ATOM	4126	CA	ASN	B	40	-19.394	90.596	17.170	1.00	31.52	BBBB
ATOM	4127	CB	ASN	B	40	-20.884	90.443	16.954	1.00	31.44	BBBB
ATOM	4128	CG	ASN	B	40	-21.393	89.147	17.492	1.00	32.50	BBBB
ATOM	4129	OD1	ASN	B	40	-20.853	88.090	17.168	1.00	32.91	BBBB
ATOM	4130	ND2	ASN	B	40	-22.435	89.205	18.319	1.00	30.17	BBBB
ATOM	4131	C	ASN	B	40	-18.942	91.957	16.673	1.00	30.43	BBBB
ATOM	4132	O	ASN	B	40	-18.989	92.946	17.398	1.00	28.27	BBBB
ATOM	4133	N	LEU	B	41	-18.507	91.994	15.420	1.00	30.26	BBBB
ATOM	4134	CA	LEU	B	41	-18.060	93.227	14.795	1.00	30.00	BBBB
ATOM	4135	CB	LEU	B	41	-16.808	92.968	13.966	1.00	28.81	BBBB
ATOM	4136	CG	LEU	B	41	-16.369	94.210	13.190	1.00	31.13	BBBB
ATOM	4137	CD1	LEU	B	41	-16.085	95.330	14.183	1.00	32.32	BBBB
ATOM	4138	CD2	LEU	B	41	-15.146	93.907	12.343	1.00	30.82	BBBB
ATOM	4139	C	LEU	B	41	-19.193	93.721	13.898	1.00	30.70	BBBB
ATOM	4140	O	LEU	B	41	-19.394	93.202	12.804	1.00	30.84	BBBB
ATOM	4141	N	GLU	B	42	-19.922	94.731	14.361	1.00	31.77	BBBB
ATOM	4142	CA	GLU	B	42	-21.063	95.266	13.618	1.00	30.97	BBBB
ATOM	4143	CB	GLU	B	42	-22.310	95.207	14.500	1.00	29.36	BBBB
ATOM	4144	CG	GLU	B	42	-22.673	93.779	14.893	1.00	27.91	BBBB
ATOM	4145	CD	GLU	B	42	-23.838	93.700	15.865	1.00	30.15	BBBB
ATOM	4146	OE1	GLU	B	42	-24.600	92.700	15.803	1.00	30.47	BBBB
ATOM	4147	OE2	GLU	B	42	-23.988	94.624	16.700	1.00	29.21	BBBB
ATOM	4148	C	GLU	B	42	-20.871	96.674	13.093	1.00	31.68	BBBB
ATOM	4149	O	GLU	B	42	-21.077	97.640	13.813	1.00	34.15	BBBB
ATOM	4150	N	ILE	B	43	-20.462	96.783	11.832	1.00	31.88	BBBB
ATOM	4151	CA	ILE	B	43	-20.261	98.076	11.189	1.00	31.70	BBBB
ATOM	4152	CB	ILE	B	43	-19.049	98.034	10.269	1.00	30.88	BBBB
ATOM	4153	CG2	ILE	B	43	-18.858	99.379	9.592	1.00	26.49	BBBB
ATOM	4154	CG1	ILE	B	43	-17.816	97.654	11.091	1.00	28.46	BBBB
ATOM	4155	CD1	ILE	B	43	-16.961	96.622	10.443	1.00	26.17	BBBB
ATOM	4156	C	ILE	B	43	-21.518	98.354	10.363	1.00	34.35	BBBB
ATOM	4157	O	ILE	B	43	-21.696	97.782	9.291	1.00	34.05	BBBB
ATOM	4158	N	THR	B	44	-22.396	99.214	10.881	1.00	34.36	BBBB
ATOM	4159	CA	THR	B	44	-23.646	99.527	10.201	1.00	35.26	BBBB
ATOM	4160	CB	THR	B	44	-24.827	98.883	10.905	1.00	33.22	BBBB
ATOM	4161	OG1	THR	B	44	-24.979	99.487	12.187	1.00	28.44	BBBB
ATOM	4162	CG2	THR	B	44	-24.617	97.396	11.055	1.00	32.34	BBBB
ATOM	4163	C	THR	B	44	-23.969	101.012	10.108	1.00	36.70	BBBB
ATOM	4164	O	THR	B	44	-23.510	101.816	10.921	1.00	38.26	BBBB
ATOM	4165	N	TYR	B	45	-24.785	101.352	9.112	1.00	35.22	BBBB
ATOM	4166	CA	TYR	B	45	-25.239	102.722	8.868	1.00	33.77	BBBB
ATOM	4167	CB	TYR	B	45	-26.257	103.133	9.924	1.00	29.72	BBBB
ATOM	4168	CG	TYR	B	45	-27.420	102.192	10.041	1.00	31.55	BBBB
ATOM	4169	CD1	TYR	B	45	-27.420	101.167	10.971	1.00	31.63	BBBB
ATOM	4170	CE1	TYR	B	45	-28.513	100.312	11.091	1.00	34.47	BBBB
ATOM	4171	CD2	TYR	B	45	-28.540	102.337	9.225	1.00	33.89	BBBB
ATOM	4172	CE2	TYR	B	45	-29.638	101.487	9.334	1.00	30.77	BBBB
ATOM	4173	CZ	TYR	B	45	-29.621	100.481	10.266	1.00	32.23	BBBB
ATOM	4174	OH	TYR	B	45	-30.708	99.646	10.386	1.00	31.30	BBBB
ATOM	4175	C	TYR	B	45	-24.175	103.803	8.797	1.00	33.02	BBBB
ATOM	4176	O	TYR	B	45	-24.458	104.959	9.101	1.00	33.59	BBBB
ATOM	4177	N	VAL	B	46	-22.959	103.444	8.419	1.00	32.03	BBBB
ATOM	4178	CA	VAL	B	46	-21.906	104.437	8.337	1.00	33.71	BBBB
ATOM	4179	CB	VAL	B	46	-20.520	103.785	8.407	1.00	32.27	BBBB
ATOM	4180	CG1	VAL	B	46	-19.444	104.842	8.432	1.00	28.84	BBBB
ATOM	4181	CG2	VAL	B	46	-20.440	102.921	9.645	1.00	31.29	BBBB
ATOM	4182	C	VAL	B	46	-22.106	105.146	7.017	1.00	36.89	BBBB
ATOM	4183	O	VAL	B	46	-22.273	104.509	5.977	1.00	37.60	BBBB
ATOM	4184	N	GLN	B	47	-22.092	106.470	7.067	1.00	39.72	BBBB
ATOM	4185	CA	GLN	B	47	-22.348	107.286	5.893	1.00	41.00	BBBB
ATOM	4186	CB	GLN	B	47	-23.138	108.514	6.308	1.00	40.83	BBBB
ATOM	4187	CG	GLN	B	47	-24.389	108.165	7.073	1.00	41.20	BBBB
ATOM	4188	CD	GLN	B	47	-25.381	107.416	6.222	1.00	45.18	BBBB
ATOM	4189	OE1	GLN	B	47	-25.753	107.873	5.140	1.00	48.86	BBBB
ATOM	4190	NE2	GLN	B	47	-25.828	106.260	6.703	1.00	46.06	BBBB
ATOM	4191	C	GLN	B	47	-21.137	107.704	5.089	1.00	43.91	BBBB
ATOM	4192	O	GLN	B	47	-19.990	107.578	5.528	1.00	45.16	BBBB
ATOM	4193	N	ARG	B	48	-21.413	108.217	3.897	1.00	45.65	BBBB
ATOM	4194	CA	ARG	B	48	-20.366	108.633	2.991	1.00	45.80	BBBB
ATOM	4195	CB	ARG	B	48	-20.978	109.219	1.717	1.00	47.02	BBBB

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ATOM	4196	CG	ARG	B	48	-19.965	109.535	0.624	1.00	47.26	BBBB
ATOM	4197	CD	ARG	B	48	-20.645	110.117	-0.605	0.01	48.70	BBBB
ATOM	4198	NE	ARG	B	48	-19.692	110.436	-1.664	0.01	49.83	BBBB
ATOM	4199	CZ	ARG	B	48	-20.026	110.963	-2.838	0.01	50.50	BBBB
ATOM	4200	NH1	ARG	B	48	-21.296	111.235	-3.109	0.01	51.03	BBBB
ATOM	4201	NH2	ARG	B	48	-19.091	111.221	-3.742	0.01	51.06	BBBB
ATOM	4202	C	ARG	B	48	-19.420	109.632	3.615	1.00	45.99	BBBB
ATOM	4203	O	ARG	B	48	-19.839	110.557	4.308	1.00	46.84	BBBB
ATOM	4204	N	ASN	B	49	-18.137	109.418	3.363	1.00	46.83	BBBB
ATOM	4205	CA	ASN	B	49	-17.078	110.283	3.844	1.00	46.58	BBBB
ATOM	4206	CB	ASN	B	49	-17.401	111.729	3.489	1.00	49.76	BBBB
ATOM	4207	CG	ASN	B	49	-17.164	112.033	2.015	1.00	52.89	BBBB
ATOM	4208	OD1	ASN	B	49	-17.777	112.947	1.453	1.00	54.45	BBBB
ATOM	4209	ND2	ASN	B	49	-16.258	111.277	1.385	1.00	51.55	BBBB
ATOM	4210	C	ASN	B	49	-16.720	110.161	5.311	1.00	45.75	BBBB
ATOM	4211	O	ASN	B	49	-15.818	110.849	5.784	1.00	47.21	BBBB
ATOM	4212	N	TYR	B	50	-17.412	109.301	6.042	1.00	43.58	BBBB
ATOM	4213	CA	TYR	B	50	-17.062	109.105	7.437	1.00	43.15	BBBB
ATOM	4214	CB	TYR	B	50	-18.197	108.386	8.165	1.00	43.96	BBBB
ATOM	4215	CG	TYR	B	50	-19.181	109.343	8.790	1.00	44.81	BBBB
ATOM	4216	CD1	TYR	B	50	-20.045	110.109	7.999	1.00	44.59	BBBB
ATOM	4217	CE1	TYR	B	50	-20.887	111.063	8.567	1.00	42.26	BBBB
ATOM	4218	CD2	TYR	B	50	-19.188	109.553	10.169	1.00	43.79	BBBB
ATOM	4219	CE2	TYR	B	50	-20.023	110.507	10.748	1.00	44.03	BBBB
ATOM	4220	CZ	TYR	B	50	-20.868	111.257	9.941	1.00	42.93	BBBB
ATOM	4221	OH	TYR	B	50	-21.682	112.200	10.517	1.00	41.71	BBBB
ATOM	4222	C	TYR	B	50	-15.757	108.291	7.500	1.00	42.97	BBBB
ATOM	4223	O	TYR	B	50	-15.590	107.329	6.763	1.00	44.98	BBBB
ATOM	4224	N	ASP	B	51	-14.828	108.690	8.362	1.00	42.65	BBBB
ATOM	4225	CA	ASP	B	51	-13.542	108.006	8.495	1.00	42.46	BBBB
ATOM	4226	CB	ASP	B	51	-12.502	108.952	9.104	1.00	43.09	BBBB
ATOM	4227	CG	ASP	B	51	-11.086	108.381	9.061	1.00	46.50	BBBB
ATOM	4228	OD1	ASP	B	51	-10.829	107.472	8.232	1.00	46.26	BBBB
ATOM	4229	OD2	ASP	B	51	-10.223	108.860	9.839	1.00	44.69	BBBB
ATOM	4230	C	ASP	B	51	-13.659	106.748	9.348	1.00	42.84	BBBB
ATOM	4231	O	ASP	B	51	-14.060	106.806	10.509	1.00	43.96	BBBB
ATOM	4232	N	LEU	B	52	-13.314	105.609	8.757	1.00	42.12	BBBB
ATOM	4233	CA	LEU	B	52	-13.386	104.324	9.441	1.00	41.04	BBBB
ATOM	4234	CB	LEU	B	52	-14.272	103.354	8.660	1.00	36.91	BBBB
ATOM	4235	CG	LEU	B	52	-15.780	103.541	8.659	1.00	33.19	BBBB
ATOM	4236	CD1	LEU	B	52	-16.408	102.434	7.845	1.00	30.46	BBBB
ATOM	4237	CD2	LEU	B	52	-16.304	103.493	10.091	1.00	32.74	BBBB
ATOM	4238	C	LEU	B	52	-11.998	103.726	9.537	1.00	42.49	BBBB
ATOM	4239	O	LEU	B	52	-11.851	102.532	9.769	1.00	42.78	BBBB
ATOM	4240	N	SER	B	53	-10.986	104.565	9.356	1.00	44.21	BBBB
ATOM	4241	CA	SER	B	53	-9.599	104.124	9.383	1.00	45.78	BBBB
ATOM	4242	CB	SER	B	53	-8.662	105.319	9.223	1.00	46.64	BBBB
ATOM	4243	OG	SER	B	53	-8.648	106.101	10.405	1.00	51.81	BBBB
ATOM	4244	C	SER	B	53	-9.234	103.363	10.643	1.00	45.91	BBBB
ATOM	4245	O	SER	B	53	-8.269	102.603	10.653	1.00	48.01	BBBB
ATOM	4246	N	PHE	B	54	-10.006	103.562	11.705	1.00	45.83	BBBB
ATOM	4247	CA	PHE	B	54	-9.742	102.883	12.966	1.00	44.20	BBBB
ATOM	4248	CB	PHE	B	54	-10.517	103.562	14.098	1.00	41.32	BBBB
ATOM	4249	CG	PHE	B	54	-12.011	103.455	13.968	1.00	37.89	BBBB
ATOM	4250	CD1	PHE	B	54	-12.661	102.241	14.186	1.00	36.47	BBBB
ATOM	4251	CD2	PHE	B	54	-12.772	104.576	13.650	1.00	36.41	BBBB
ATOM	4252	CE1	PHE	B	54	-14.044	102.140	14.092	1.00	34.47	BBBB
ATOM	4253	CE2	PHE	B	54	-14.161	104.493	13.552	1.00	35.84	BBBB
ATOM	4254	CZ	PHE	B	54	-14.799	103.269	13.774	1.00	37.14	BBBB
ATOM	4255	C	PHE	B	54	-10.097	101.404	12.922	1.00	45.31	BBBB
ATOM	4256	O	PHE	B	54	-10.112	100.730	13.950	1.00	48.82	BBBB
ATOM	4257	N	LEU	B	55	-10.402	100.889	11.741	1.00	45.41	BBBB
ATOM	4258	CA	LEU	B	55	-10.749	99.482	11.637	1.00	44.90	BBBB
ATOM	4259	CB	LEU	B	55	-11.943	99.284	10.690	1.00	40.96	BBBB
ATOM	4260	CG	LEU	B	55	-13.287	99.749	11.266	1.00	38.09	BBBB
ATOM	4261	CD1	LEU	B	55	-14.404	99.414	10.327	1.00	35.50	BBBB
ATOM	4262	CD2	LEU	B	55	-13.541	99.075	12.594	1.00	35.49	BBBB
ATOM	4263	C	LEU	B	55	-9.539	98.689	11.169	1.00	45.71	BBBB
ATOM	4264	O	LEU	B	55	-9.544	97.454	11.196	1.00	46.98	BBBB
ATOM	4265	N	LYS	B	56	-8.496	99.410	10.763	1.00	44.56	BBBB
ATOM	4266	CA	LYS	B	56	-7.267	98.784	10.300	1.00	43.83	BBBB
ATOM	4267	CB	LYS	B	56	-6.300	99.851	9.782	1.00	45.19	BBBB
ATOM	4268	CG	LYS	B	56	-6.813	100.603	8.565	1.00	47.88	BBBB
ATOM	4269	CD	LYS	B	56	-5.848	101.679	8.065	1.00	47.63	BBBB
ATOM	4270	CE	LYS	B	56	-6.531	102.509	6.972	1.00	50.64	BBBB

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ATOM	4271	NZ	LYS	B	56	-5.739	103.655	6.440	1.00	51.10	BBBB
ATOM	4272	C	LYS	B	56	-6.590	97.975	11.409	1.00	43.65	BBBB
ATOM	4273	O	LYS	B	56	-5.863	97.018	11.134	1.00	43.13	BBBB
ATOM	4274	N	THR	B	57	-6.838	98.353	12.662	1.00	42.76	BBBB
ATOM	4275	CA	THR	B	57	-6.224	97.662	13.794	1.00	42.17	BBBB
ATOM	4276	CB	THR	B	57	-6.194	98.545	15.054	1.00	42.54	BBBB
ATOM	4277	OG1	THR	B	57	-7.532	98.879	15.441	1.00	44.16	BBBB
ATOM	4278	CG2	THR	B	57	-5.408	99.805	14.798	1.00	41.04	BBBB
ATOM	4279	C	THR	B	57	-6.874	96.340	14.177	1.00	41.12	BBBB
ATOM	4280	O	THR	B	57	-6.262	95.547	14.881	1.00	42.45	BBBB
ATOM	4281	N	ILE	B	58	-8.098	96.097	13.719	1.00	39.31	BBBB
ATOM	4282	CA	ILE	B	58	-8.787	94.857	14.042	1.00	37.76	BBBB
ATOM	4283	CB	ILE	B	58	-10.272	94.925	13.620	1.00	37.36	BBBB
ATOM	4284	CG2	ILE	B	58	-10.922	93.547	13.747	1.00	34.45	BBBB
ATOM	4285	CG1	ILE	B	58	-10.993	95.968	14.484	1.00	35.68	BBBB
ATOM	4286	CD1	ILE	B	58	-12.502	95.926	14.419	1.00	33.28	BBBB
ATOM	4287	C	ILE	B	58	-8.110	93.658	13.388	1.00	38.56	BBBB
ATOM	4288	O	ILE	B	58	-7.849	93.658	12.192	1.00	38.92	BBBB
ATOM	4289	N	GLN	B	59	-7.823	92.627	14.179	1.00	40.51	BBBB
ATOM	4290	CA	GLN	B	59	-7.149	91.448	13.647	1.00	40.04	BBBB
ATOM	4291	CB	GLN	B	59	-5.812	91.279	14.359	1.00	40.96	BBBB
ATOM	4292	CG	GLN	B	59	-4.851	92.409	14.044	1.00	42.93	BBBB
ATOM	4293	CD	GLN	B	59	-3.651	92.433	14.962	1.00	46.66	BBBB
ATOM	4294	OE1	GLN	B	59	-3.155	91.378	15.390	1.00	47.12	BBBB
ATOM	4295	NE2	GLN	B	59	-3.159	93.639	15.262	1.00	45.18	BBBB
ATOM	4296	C	GLN	B	59	-7.961	90.161	13.704	1.00	39.00	BBBB
ATOM	4297	O	GLN	B	59	-7.810	89.285	12.849	1.00	37.07	BBBB
ATOM	4298	N	GLU	B	60	-8.816	90.029	14.705	1.00	38.04	BBBB
ATOM	4299	CA	GLU	B	60	-9.640	88.836	14.772	1.00	40.97	BBBB
ATOM	4300	CB	GLU	B	60	-8.890	87.684	15.462	1.00	44.97	BBBB
ATOM	4301	CG	GLU	B	60	-8.581	87.848	16.936	1.00	49.29	BBBB
ATOM	4302	CD	GLU	B	60	-7.879	86.616	17.501	1.00	51.60	BBBB
ATOM	4303	OE1	GLU	B	60	-6.680	86.426	17.205	1.00	50.93	BBBB
ATOM	4304	OE2	GLU	B	60	-8.536	85.834	18.226	1.00	51.08	BBBB
ATOM	4305	C	GLU	B	60	-10.965	89.116	15.450	1.00	39.39	BBBB
ATOM	4306	O	GLU	B	60	-11.076	90.067	16.219	1.00	42.04	BBBB
ATOM	4307	N	VAL	B	61	-11.967	88.296	15.150	1.00	36.83	BBBB
ATOM	4308	CA	VAL	B	61	-13.300	88.475	15.707	1.00	36.21	BBBB
ATOM	4309	CB	VAL	B	61	-14.246	89.096	14.646	1.00	35.48	BBBB
ATOM	4310	CG1	VAL	B	61	-15.660	89.227	15.189	1.00	34.19	BBBB
ATOM	4311	CG2	VAL	B	61	-13.712	90.445	14.216	1.00	34.29	BBBB
ATOM	4312	C	VAL	B	61	-13.837	87.125	16.143	1.00	36.81	BBBB
ATOM	4313	O	VAL	B	61	-13.972	86.214	15.332	1.00	38.75	BBBB
ATOM	4314	N	ALA	B	62	-14.153	87.002	17.426	1.00	36.35	BBBB
ATOM	4315	CA	ALA	B	62	-14.647	85.746	17.972	1.00	36.96	BBBB
ATOM	4316	CB	ALA	B	62	-14.627	85.807	19.475	1.00	35.69	BBBB
ATOM	4317	C	ALA	B	62	-16.042	85.367	17.494	1.00	40.52	BBBB
ATOM	4318	O	ALA	B	62	-16.296	84.192	17.193	1.00	41.85	BBBB
ATOM	4319	N	GLY	B	63	-16.941	86.357	17.440	1.00	40.51	BBBB
ATOM	4320	CA	GLY	B	63	-18.312	86.120	17.016	1.00	39.16	BBBB
ATOM	4321	C	GLY	B	63	-18.486	86.266	15.519	1.00	39.36	BBBB
ATOM	4322	O	GLY	B	63	-17.700	85.695	14.768	1.00	39.78	BBBB
ATOM	4323	N	TYR	B	64	-19.509	87.009	15.079	1.00	37.88	BBBB
ATOM	4324	CA	TYR	B	64	-19.721	87.225	13.643	1.00	35.80	BBBB
ATOM	4325	CB	TYR	B	64	-21.164	86.906	13.242	1.00	33.30	BBBB
ATOM	4326	CG	TYR	B	64	-22.235	87.739	13.934	1.00	31.41	BBBB
ATOM	4327	CD1	TYR	B	64	-22.400	89.100	13.654	1.00	26.26	BBBB
ATOM	4328	CE1	TYR	B	64	-23.371	89.847	14.311	1.00	26.22	BBBB
ATOM	4329	CD2	TYR	B	64	-23.072	87.161	14.881	1.00	30.26	BBBB
ATOM	4330	CE2	TYR	B	64	-24.037	87.898	15.532	1.00	27.97	BBBB
ATOM	4331	CZ	TYR	B	64	-24.187	89.234	15.251	1.00	27.41	BBBB
ATOM	4332	OH	TYR	B	64	-25.169	89.941	15.927	1.00	29.90	BBBB
ATOM	4333	C	TYR	B	64	-19.377	88.653	13.217	1.00	36.12	BBBB
ATOM	4334	O	TYR	B	64	-19.171	89.536	14.055	1.00	36.62	BBBB
ATOM	4335	N	VAL	B	65	-19.307	88.856	11.904	1.00	35.99	BBBB
ATOM	4336	CA	VAL	B	65	-19.010	90.155	11.304	1.00	34.85	BBBB
ATOM	4337	CB	VAL	B	65	-17.758	90.091	10.405	1.00	33.30	BBBB
ATOM	4338	CG1	VAL	B	65	-17.523	91.448	9.722	1.00	32.28	BBBB
ATOM	4339	CG2	VAL	B	65	-16.558	89.694	11.224	1.00	30.81	BBBB
ATOM	4340	C	VAL	B	65	-20.205	90.569	10.444	1.00	35.28	BBBB
ATOM	4341	O	VAL	B	65	-20.472	89.965	9.414	1.00	35.08	BBBB
ATOM	4342	N	LEU	B	66	-20.917	91.600	10.887	1.00	36.55	BBBB
ATOM	4343	CA	LEU	B	66	-22.093	92.121	10.192	1.00	35.21	BBBB
ATOM	4344	CB	LEU	B	66	-23.241	92.267	11.176	1.00	36.08	BBBB
ATOM	4345	CG	LEU	B	66	-24.543	92.897	10.698	1.00	35.65	BBBB

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ATOM	4346	CD1	LEU	B	66	-25.075	92.183	9.458	1.00	34.57	BBBB
ATOM	4347	CD2	LEU	B	66	-25.538	92.800	11.848	1.00	33.70	BBBB
ATOM	4348	C	LEU	B	66	-21.814	93.483	9.586	1.00	34.79	BBBB
ATOM	4349	O	LEU	B	66	-21.578	94.442	10.310	1.00	36.79	BBBB
ATOM	4350	N	ILE	B	67	-21.827	93.557	8.262	1.00	34.25	BBBB
ATOM	4351	CA	ILE	B	67	-21.601	94.806	7.539	1.00	33.94	BBBB
ATOM	4352	CB	ILE	B	67	-20.406	94.668	6.606	1.00	30.89	BBBB
ATOM	4353	CG2	ILE	B	67	-20.353	95.812	5.638	1.00	26.77	BBBB
ATOM	4354	CG1	ILE	B	67	-19.132	94.612	7.444	1.00	30.51	BBBB
ATOM	4355	CD1	ILE	B	67	-17.955	94.034	6.715	1.00	30.23	BBBB
ATOM	4356	C	ILE	B	67	-22.877	95.085	6.746	1.00	36.67	BBBB
ATOM	4357	O	ILE	B	67	-23.102	94.490	5.687	1.00	37.99	BBBB
ATOM	4358	N	ALA	B	68	-23.717	95.977	7.272	1.00	37.11	BBBB
ATOM	4359	CA	ALA	B	68	-24.988	96.285	6.634	1.00	38.62	BBBB
ATOM	4360	CB	ALA	B	68	-26.074	95.427	7.237	1.00	34.98	BBBB
ATOM	4361	C	ALA	B	68	-25.439	97.741	6.655	1.00	41.81	BBBB
ATOM	4362	O	ALA	B	68	-25.190	98.483	7.616	1.00	43.44	BBBB
ATOM	4363	N	LEU	B	69	-26.117	98.116	5.568	1.00	42.51	BBBB
ATOM	4364	CA	LEU	B	69	-26.701	99.433	5.362	1.00	41.13	BBBB
ATOM	4365	CB	LEU	B	69	-27.864	99.641	6.351	1.00	40.99	BBBB
ATOM	4366	CG	LEU	B	69	-29.088	98.703	6.253	1.00	43.40	BBBB
ATOM	4367	CD1	LEU	B	69	-28.667	97.256	6.307	1.00	44.80	BBBB
ATOM	4368	CD2	LEU	B	69	-30.031	98.951	7.403	1.00	42.99	BBBB
ATOM	4369	C	LEU	B	69	-25.705	100.569	5.467	1.00	42.12	BBBB
ATOM	4370	O	LEU	B	69	-25.986	101.589	6.077	1.00	45.10	BBBB
ATOM	4371	N	ASN	B	70	-24.544	100.412	4.857	1.00	41.43	BBBB
ATOM	4372	CA	ASN	B	70	-23.530	101.457	4.924	1.00	42.42	BBBB
ATOM	4373	CB	ASN	B	70	-22.183	100.860	5.351	1.00	44.35	BBBB
ATOM	4374	CG	ASN	B	70	-22.249	100.205	6.706	1.00	45.54	BBBB
ATOM	4375	OD1	ASN	B	70	-22.214	100.886	7.732	1.00	47.62	BBBB
ATOM	4376	ND2	ASN	B	70	-22.375	98.876	6.721	1.00	44.33	BBBB
ATOM	4377	C	ASN	B	70	-23.365	102.143	3.590	1.00	42.35	BBBB
ATOM	4378	O	ASN	B	70	-23.253	101.489	2.568	1.00	42.28	BBBB
ATOM	4379	N	THR	B	71	-23.335	103.467	3.597	1.00	43.79	BBBB
ATOM	4380	CA	THR	B	71	-23.167	104.196	2.350	1.00	43.99	BBBB
ATOM	4381	CB	THR	B	71	-24.081	105.433	2.275	1.00	42.39	BBBB
ATOM	4382	OG1	THR	B	71	-23.609	106.437	3.181	1.00	44.98	BBBB
ATOM	4383	CG2	THR	B	71	-25.498	105.061	2.639	1.00	39.43	BBBB
ATOM	4384	C	THR	B	71	-21.721	104.638	2.221	1.00	43.98	BBBB
ATOM	4385	O	THR	B	71	-21.298	105.052	1.142	1.00	46.05	BBBB
ATOM	4386	N	VAL	B	72	-20.965	104.556	3.315	1.00	41.88	BBBB
ATOM	4387	CA	VAL	B	72	-19.557	104.942	3.274	1.00	41.35	BBBB
ATOM	4388	CB	VAL	B	72	-18.830	104.627	4.612	1.00	39.06	BBBB
ATOM	4389	CG1	VAL	B	72	-18.793	103.143	4.858	1.00	35.73	BBBB
ATOM	4390	CG2	VAL	B	72	-17.431	105.195	4.589	1.00	37.77	BBBB
ATOM	4391	C	VAL	B	72	-18.962	104.123	2.135	1.00	44.61	BBBB
ATOM	4392	O	VAL	B	72	-19.454	103.036	1.827	1.00	45.80	BBBB
ATOM	4393	N	GLU	B	73	-17.915	104.619	1.497	1.00	46.60	BBBB
ATOM	4394	CA	GLU	B	73	-17.377	103.873	0.370	1.00	49.77	BBBB
ATOM	4395	CB	GLU	B	73	-16.905	104.844	-0.714	1.00	53.30	BBBB
ATOM	4396	CG	GLU	B	73	-18.049	105.377	-1.566	1.00	59.10	BBBB
ATOM	4397	CD	GLU	B	73	-17.603	106.454	-2.527	1.00	63.29	BBBB
ATOM	4398	OE1	GLU	B	73	-16.594	106.230	-3.241	1.00	64.88	BBBB
ATOM	4399	OE2	GLU	B	73	-18.269	107.518	-2.565	1.00	64.24	BBBB
ATOM	4400	C	GLU	B	73	-16.296	102.844	0.639	1.00	48.75	BBBB
ATOM	4401	O	GLU	B	73	-16.171	101.875	-0.110	1.00	49.11	BBBB
ATOM	4402	N	ARG	B	74	-15.516	103.043	1.694	1.00	46.54	BBBB
ATOM	4403	CA	ARG	B	74	-14.446	102.109	2.009	1.00	43.31	BBBB
ATOM	4404	CB	ARG	B	74	-13.099	102.752	1.673	1.00	41.41	BBBB
ATOM	4405	CG	ARG	B	74	-11.915	101.845	1.879	1.00	43.55	BBBB
ATOM	4406	CD	ARG	B	74	-10.633	102.464	1.370	1.00	43.78	BBBB
ATOM	4407	NE	ARG	B	74	-9.726	101.434	0.872	1.00	48.82	BBBB
ATOM	4408	CZ	ARG	B	74	-8.620	101.034	1.493	1.00	51.30	BBBB
ATOM	4409	NH1	ARG	B	74	-8.265	101.587	2.651	1.00	52.41	BBBB
ATOM	4410	NH2	ARG	B	74	-7.876	100.065	0.965	1.00	51.69	BBBB
ATOM	4411	C	ARG	B	74	-14.470	101.659	3.472	1.00	41.82	BBBB
ATOM	4412	O	ARG	B	74	-14.592	102.469	4.388	1.00	41.44	BBBB
ATOM	4413	N	ILE	B	75	-14.370	100.356	3.679	1.00	39.86	BBBB
ATOM	4414	CA	ILE	B	75	-14.352	99.788	5.020	1.00	37.60	BBBB
ATOM	4415	CB	ILE	B	75	-15.553	98.868	5.240	1.00	34.27	BBBB
ATOM	4416	CG2	ILE	B	75	-15.501	98.256	6.641	1.00	34.36	BBBB
ATOM	4417	CG1	ILE	B	75	-16.831	99.678	5.044	1.00	30.98	BBBB
ATOM	4418	CD1	ILE	B	75	-18.081	98.950	5.393	1.00	31.35	BBBB
ATOM	4419	C	ILE	B	75	-13.049	98.999	5.120	1.00	37.82	BBBB
ATOM	4420	O	ILE	B	75	-13.016	97.802	4.855	1.00	37.97	BBBB

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ATOM	4421	N	PRO	B	76	-11.961	99.678	5.515	1.00	36.88	BBBB
ATOM	4422	CD	PRO	B	76	-12.067	101.022	6.110	1.00	35.83	BBBB
ATOM	4423	CA	PRO	B	76	-10.598	99.166	5.675	1.00	36.58	BBBB
ATOM	4424	CB	PRO	B	76	-9.798	100.430	5.996	1.00	34.96	BBBB
ATOM	4425	CG	PRO	B	76	-10.734	101.176	6.840	1.00	34.77	BBBB
ATOM	4426	C	PRO	B	76	-10.312	98.053	6.680	1.00	36.07	BBBB
ATOM	4427	O	PRO	B	76	-9.391	98.183	7.482	1.00	36.88	BBBB
ATOM	4428	N	LEU	B	77	-11.072	96.965	6.639	1.00	35.83	BBBB
ATOM	4429	CA	LEU	B	77	-10.800	95.840	7.533	1.00	35.98	BBBB
ATOM	4430	CB	LEU	B	77	-11.978	94.857	7.560	1.00	34.02	BBBB
ATOM	4431	CG	LEU	B	77	-13.244	95.319	8.281	1.00	33.37	BBBB
ATOM	4432	CD1	LEU	B	77	-14.294	94.235	8.276	1.00	27.46	BBBB
ATOM	4433	CD2	LEU	B	77	-12.879	95.704	9.705	1.00	35.58	BBBB
ATOM	4434	C	LEU	B	77	-9.569	95.140	6.962	1.00	36.56	BBBB
ATOM	4435	O	LEU	B	77	-9.529	93.916	6.857	1.00	35.76	BBBB
ATOM	4436	N	GLU	B	78	-8.563	95.931	6.605	1.00	37.90	BBBB
ATOM	4437	CA	GLU	B	78	-7.345	95.418	5.996	1.00	41.62	BBBB
ATOM	4438	CB	GLU	B	78	-6.395	96.572	5.686	1.00	43.16	BBBB
ATOM	4439	CG	GLU	B	78	-7.011	97.684	4.859	1.00	45.69	BBBB
ATOM	4440	CD	GLU	B	78	-6.070	98.859	4.692	1.00	48.21	BBBB
ATOM	4441	OE1	GLU	B	78	-5.251	99.087	5.610	1.00	50.79	BBBB
ATOM	4442	OE2	GLU	B	78	-6.153	99.561	3.661	1.00	48.53	BBBB
ATOM	4443	C	GLU	B	78	-6.584	94.348	6.765	1.00	42.68	BBBB
ATOM	4444	O	GLU	B	78	-5.924	93.505	6.155	1.00	43.47	BBBB
ATOM	4445	N	ASN	B	79	-6.664	94.366	8.092	1.00	42.79	BBBB
ATOM	4446	CA	ASN	B	79	-5.944	93.372	8.877	1.00	42.33	BBBB
ATOM	4447	CB	ASN	B	79	-5.083	94.063	9.908	1.00	43.85	BBBB
ATOM	4448	CG	ASN	B	79	-4.021	94.894	9.274	1.00	47.28	BBBB
ATOM	4449	OD1	ASN	B	79	-3.205	94.386	8.502	1.00	48.53	BBBB
ATOM	4450	ND2	ASN	B	79	-4.021	96.186	9.578	1.00	48.81	BBBB
ATOM	4451	C	ASN	B	79	-6.772	92.309	9.555	1.00	41.48	BBBB
ATOM	4452	O	ASN	B	79	-6.246	91.497	10.303	1.00	43.49	BBBB
ATOM	4453	N	LEU	B	80	-8.071	92.309	9.318	1.00	40.60	BBBB
ATOM	4454	CA	LEU	B	80	-8.896	91.283	9.922	1.00	40.18	BBBB
ATOM	4455	CB	LEU	B	80	-10.355	91.482	9.519	1.00	34.46	BBBB
ATOM	4456	CG	LEU	B	80	-11.238	90.307	9.898	1.00	32.95	BBBB
ATOM	4457	CD1	LEU	B	80	-11.237	90.135	11.410	1.00	30.76	BBBB
ATOM	4458	CD2	LEU	B	80	-12.635	90.538	9.368	1.00	32.93	BBBB
ATOM	4459	C	LEU	B	80	-8.354	89.959	9.375	1.00	40.73	BBBB
ATOM	4460	O	LEU	B	80	-8.270	89.782	8.171	1.00	42.10	BBBB
ATOM	4461	N	GLN	B	81	-7.970	89.040	10.254	1.00	43.95	BBBB
ATOM	4462	CA	GLN	B	81	-7.423	87.749	9.819	1.00	45.18	BBBB
ATOM	4463	CB	GLN	B	81	-6.147	87.426	10.574	1.00	47.44	BBBB
ATOM	4464	CG	GLN	B	81	-4.945	88.107	10.050	1.00	52.25	BBBB
ATOM	4465	CD	GLN	B	81	-3.750	87.231	10.205	1.00	55.11	BBBB
ATOM	4466	OE1	GLN	B	81	-3.421	86.813	11.320	1.00	55.41	BBBB
ATOM	4467	NE2	GLN	B	81	-3.086	86.925	9.084	1.00	55.66	BBBB
ATOM	4468	C	GLN	B	81	-8.328	86.547	9.958	1.00	43.31	BBBB
ATOM	4469	O	GLN	B	81	-8.316	85.647	9.116	1.00	42.96	BBBB
ATOM	4470	N	ILE	B	82	-9.088	86.511	11.040	1.00	42.06	BBBB
ATOM	4471	CA	ILE	B	82	-9.978	85.386	11.267	1.00	41.80	BBBB
ATOM	4472	CB	ILE	B	82	-9.289	84.300	12.156	1.00	42.30	BBBB
ATOM	4473	CG2	ILE	B	82	-8.603	84.949	13.370	1.00	39.56	BBBB
ATOM	4474	CG1	ILE	B	82	-10.322	83.268	12.599	1.00	41.21	BBBB
ATOM	4475	CD1	ILE	B	82	-9.784	82.255	13.542	1.00	46.10	BBBB
ATOM	4476	C	ILE	B	82	-11.278	85.805	11.931	1.00	40.36	BBBB
ATOM	4477	O	ILE	B	82	-11.315	86.756	12.708	1.00	39.04	BBBB
ATOM	4478	N	ILE	B	83	-12.343	85.089	11.604	1.00	40.39	BBBB
ATOM	4479	CA	ILE	B	83	-13.652	85.335	12.190	1.00	41.65	BBBB
ATOM	4480	CB	ILE	B	83	-14.706	85.683	11.112	1.00	39.57	BBBB
ATOM	4481	CG2	ILE	B	83	-16.048	85.911	11.763	1.00	38.32	BBBB
ATOM	4482	CG1	ILE	B	83	-14.269	86.917	10.317	1.00	37.12	BBBB
ATOM	4483	CD1	ILE	B	83	-15.231	87.291	9.231	1.00	33.55	BBBB
ATOM	4484	C	ILE	B	83	-13.988	83.979	12.799	1.00	43.46	BBBB
ATOM	4485	O	ILE	B	83	-14.407	83.066	12.089	1.00	46.29	BBBB
ATOM	4486	N	ARG	B	84	-13.797	83.831	14.102	1.00	43.41	BBBB
ATOM	4487	CA	ARG	B	84	-14.055	82.536	14.714	1.00	45.55	BBBB
ATOM	4488	CB	ARG	B	84	-13.689	82.567	16.198	1.00	43.48	BBBB
ATOM	4489	CG	ARG	B	84	-12.173	82.654	16.381	1.00	40.96	BBBB
ATOM	4490	CD	ARG	B	84	-11.722	82.792	17.823	1.00	38.59	BBBB
ATOM	4491	NE	ARG	B	84	-10.351	83.296	17.849	1.00	38.64	BBBB
ATOM	4492	CZ	ARG	B	84	-9.272	82.574	17.552	1.00	37.21	BBBB
ATOM	4493	NH1	ARG	B	84	-9.385	81.296	17.222	1.00	36.34	BBBB
ATOM	4494	NH2	ARG	B	84	-8.080	83.148	17.530	1.00	35.51	BBBB
ATOM	4495	C	ARG	B	84	-15.453	81.991	14.498	1.00	47.14	BBBB

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ATOM	4496	O	ARG	B	84	-15.613	80.808	14.234	1.00	49.19	BBBB
ATOM	4497	N	GLY	B	85	-16.463	82.843	14.587	1.00	48.60	BBBB
ATOM	4498	CA	GLY	B	85	-17.815	82.374	14.374	1.00	48.64	BBBB
ATOM	4499	C	GLY	B	85	-18.389	81.697	15.595	1.00	50.67	BBBB
ATOM	4500	O	GLY	B	85	-19.225	80.798	15.480	1.00	48.65	BBBB
ATOM	4501	N	ASN	B	86	-17.942	82.141	16.769	1.00	53.10	BBBB
ATOM	4502	CA	ASN	B	86	-18.402	81.589	18.042	1.00	54.54	BBBB
ATOM	4503	CB	ASN	B	86	-17.627	82.219	19.195	1.00	54.61	BBBB
ATOM	4504	CG	ASN	B	86	-16.249	81.608	19.372	1.00	56.34	BBBB
ATOM	4505	OD1	ASN	B	86	-15.633	81.136	18.413	1.00	56.95	BBBB
ATOM	4506	ND2	ASN	B	86	-15.752	81.625	20.602	1.00	57.43	BBBB
ATOM	4507	C	ASN	B	86	-19.890	81.806	18.241	1.00	55.92	BBBB
ATOM	4508	O	ASN	B	86	-20.531	81.078	18.988	1.00	57.13	BBBB
ATOM	4509	N	MET	B	87	-20.435	82.820	17.582	1.00	57.87	BBBB
ATOM	4510	CA	MET	B	87	-21.860	83.111	17.668	1.00	60.00	BBBB
ATOM	4511	CB	MET	B	87	-22.123	84.244	18.669	1.00	62.33	BBBB
ATOM	4512	CG	MET	B	87	-21.395	84.059	20.012	1.00	66.91	BBBB
ATOM	4513	SD	MET	B	87	-22.417	84.113	21.518	1.00	72.34	BBBB
ATOM	4514	CE	MET	B	87	-23.030	82.377	21.611	1.00	67.27	BBBB
ATOM	4515	C	MET	B	87	-22.239	83.517	16.256	1.00	59.89	BBBB
ATOM	4516	O	MET	B	87	-21.458	84.180	15.578	1.00	59.63	BBBB
ATOM	4517	N	TYR	B	88	-23.417	83.099	15.801	1.00	60.95	BBBB
ATOM	4518	CA	TYR	B	88	-23.869	83.412	14.440	1.00	61.45	BBBB
ATOM	4519	CB	TYR	B	88	-24.503	82.180	13.789	1.00	61.90	BBBB
ATOM	4520	CG	TYR	B	88	-23.583	81.006	13.532	1.00	61.81	BBBB
ATOM	4521	CD1	TYR	B	88	-24.109	79.741	13.253	1.00	60.71	BBBB
ATOM	4522	CE1	TYR	B	88	-23.279	78.652	13.016	1.00	60.41	BBBB
ATOM	4523	CD2	TYR	B	88	-22.199	81.151	13.565	1.00	61.50	BBBB
ATOM	4524	CE2	TYR	B	88	-21.357	80.064	13.330	1.00	60.35	BBBB
ATOM	4525	CZ	TYR	B	88	-21.903	78.818	13.056	1.00	60.28	BBBB
ATOM	4526	OH	TYR	B	88	-21.073	77.743	12.827	1.00	58.07	BBBB
ATOM	4527	C	TYR	B	88	-24.888	84.545	14.329	1.00	61.70	BBBB
ATOM	4528	O	TYR	B	88	-25.517	84.957	15.306	1.00	60.43	BBBB
ATOM	4529	N	TYR	B	89	-25.039	85.031	13.105	1.00	62.59	BBBB
ATOM	4530	CA	TYR	B	89	-26.001	86.072	12.778	1.00	63.34	BBBB
ATOM	4531	CB	TYR	B	89	-25.330	87.197	11.992	1.00	62.11	BBBB
ATOM	4532	CG	TYR	B	89	-26.315	88.183	11.410	1.00	61.42	BBBB
ATOM	4533	CD1	TYR	B	89	-26.983	89.097	12.224	1.00	60.04	BBBB
ATOM	4534	CE1	TYR	B	89	-27.929	89.964	11.703	1.00	59.26	BBBB
ATOM	4535	CD2	TYR	B	89	-26.619	88.169	10.049	1.00	61.65	BBBB
ATOM	4536	CE2	TYR	B	89	-27.564	89.037	9.517	1.00	60.54	BBBB
ATOM	4537	CZ	TYR	B	89	-28.215	89.926	10.350	1.00	60.25	BBBB
ATOM	4538	OH	TYR	B	89	-29.164	90.765	9.826	1.00	62.99	BBBB
ATOM	4539	C	TYR	B	89	-27.021	85.366	11.890	1.00	64.25	BBBB
ATOM	4540	O	TYR	B	89	-26.649	84.768	10.882	1.00	64.10	BBBB
ATOM	4541	N	GLU	B	90	-28.294	85.422	12.267	1.00	65.76	BBBB
ATOM	4542	CA	GLU	B	90	-29.346	84.760	11.497	1.00	67.85	BBBB
ATOM	4543	CB	GLU	B	90	-29.301	85.200	10.032	1.00	69.69	BBBB
ATOM	4544	CG	GLU	B	90	-29.597	86.661	9.804	1.00	71.76	BBBB
ATOM	4545	CD	GLU	B	90	-30.963	87.064	10.309	1.00	74.36	BBBB
ATOM	4546	OE1	GLU	B	90	-31.173	87.036	11.545	1.00	74.39	BBBB
ATOM	4547	OE2	GLU	B	90	-31.826	87.406	9.467	1.00	75.93	BBBB
ATOM	4548	C	GLU	B	90	-29.207	83.241	11.562	1.00	68.00	BBBB
ATOM	4549	O	GLU	B	90	-29.669	82.528	10.670	1.00	68.57	BBBB
ATOM	4550	N	ASN	B	91	-28.556	82.762	12.618	1.00	68.13	BBBB
ATOM	4551	CA	ASN	B	91	-28.337	81.333	12.848	1.00	67.95	BBBB
ATOM	4552	CB	ASN	B	91	-29.669	80.575	12.856	1.00	69.00	BBBB
ATOM	4553	CG	ASN	B	91	-30.695	81.207	13.765	1.00	71.88	BBBB
ATOM	4554	OD1	ASN	B	91	-31.211	82.284	13.472	1.00	75.06	BBBB
ATOM	4555	ND2	ASN	B	91	-31.000	80.543	14.880	1.00	73.03	BBBB
ATOM	4556	C	ASN	B	91	-27.407	80.626	11.864	1.00	66.56	BBBB
ATOM	4557	O	ASN	B	91	-27.245	79.415	11.947	1.00	65.89	BBBB
ATOM	4558	N	SER	B	92	-26.777	81.350	10.946	1.00	65.76	BBBB
ATOM	4559	CA	SER	B	92	-25.927	80.658	9.984	1.00	64.21	BBBB
ATOM	4560	CB	SER	B	92	-26.720	80.400	8.699	1.00	65.15	BBBB
ATOM	4561	OG	SER	B	92	-28.057	80.035	8.989	1.00	67.88	BBBB
ATOM	4562	C	SER	B	92	-24.609	81.302	9.588	1.00	62.16	BBBB
ATOM	4563	O	SER	B	92	-23.638	80.596	9.309	1.00	62.51	BBBB
ATOM	4564	N	TYR	B	93	-24.562	82.629	9.565	1.00	59.13	BBBB
ATOM	4565	CA	TYR	B	93	-23.357	83.308	9.099	1.00	55.10	BBBB
ATOM	4566	CB	TYR	B	93	-23.747	84.390	8.095	1.00	54.89	BBBB
ATOM	4567	CG	TYR	B	93	-24.796	83.909	7.136	1.00	55.78	BBBB
ATOM	4568	CD1	TYR	B	93	-26.149	84.059	7.425	1.00	55.09	BBBB
ATOM	4569	CE1	TYR	B	93	-27.122	83.546	6.580	1.00	57.00	BBBB
ATOM	4570	CD2	TYR	B	93	-24.438	83.233	5.969	1.00	56.75	BBBB

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ATOM	4571	CE2	TYR	B	93	-25.402	82.714	5.117	1.00	57.26	BBBB
ATOM	4572	CZ	TYR	B	93	-26.743	82.872	5.428	1.00	57.82	BBBB
ATOM	4573	OH	TYR	B	93	-27.705	82.345	4.594	1.00	60.01	BBBB
ATOM	4574	C	TYR	B	93	-22.409	83.907	10.097	1.00	51.04	BBBB
ATOM	4575	O	TYR	B	93	-22.812	84.461	11.113	1.00	52.06	BBBB
ATOM	4576	N	ALA	B	94	-21.131	83.788	9.784	1.00	46.53	BBBB
ATOM	4577	CA	ALA	B	94	-20.104	84.365	10.620	1.00	44.08	BBBB
ATOM	4578	CB	ALA	B	94	-18.870	83.474	10.639	1.00	44.09	BBBB
ATOM	4579	C	ALA	B	94	-19.789	85.704	9.959	1.00	41.92	BBBB
ATOM	4580	O	ALA	B	94	-19.311	86.628	10.606	1.00	41.53	BBBB
ATOM	4581	N	LEU	B	95	-20.069	85.791	8.660	1.00	39.21	BBBB
ATOM	4582	CA	LEU	B	95	-19.843	87.012	7.887	1.00	37.76	BBBB
ATOM	4583	CB	LEU	B	95	-18.631	86.852	6.979	1.00	35.49	BBBB
ATOM	4584	CG	LEU	B	95	-18.415	88.070	6.094	1.00	33.63	BBBB
ATOM	4585	CD1	LEU	B	95	-17.960	89.215	6.962	1.00	32.01	BBBB
ATOM	4586	CD2	LEU	B	95	-17.405	87.759	5.008	1.00	32.10	BBBB
ATOM	4587	C	LEU	B	95	-21.048	87.373	7.017	1.00	37.37	BBBB
ATOM	4588	O	LEU	B	95	-21.444	86.595	6.152	1.00	37.51	BBBB
ATOM	4589	N	ALA	B	96	-21.617	88.554	7.235	1.00	36.61	BBBB
ATOM	4590	CA	ALA	B	96	-22.766	89.006	6.450	1.00	36.07	BBBB
ATOM	4591	CB	ALA	B	96	-24.054	88.870	7.252	1.00	35.49	BBBB
ATOM	4592	C	ALA	B	96	-22.627	90.442	5.982	1.00	36.77	BBBB
ATOM	4593	O	ALA	B	96	-22.650	91.365	6.790	1.00	36.64	BBBB
ATOM	4594	N	VAL	B	97	-22.473	90.624	4.675	1.00	37.08	BBBB
ATOM	4595	CA	VAL	B	97	-22.382	91.954	4.080	1.00	36.61	BBBB
ATOM	4596	CB	VAL	B	97	-21.276	91.992	3.045	1.00	33.72	BBBB
ATOM	4597	CG1	VAL	B	97	-21.214	93.361	2.396	1.00	34.52	BBBB
ATOM	4598	CG2	VAL	B	97	-19.964	91.655	3.708	1.00	30.28	BBBB
ATOM	4599	C	VAL	B	97	-23.750	92.201	3.414	1.00	40.04	BBBB
ATOM	4600	O	VAL	B	97	-24.046	91.640	2.348	1.00	40.99	BBBB
ATOM	4601	N	LEU	B	98	-24.577	93.041	4.037	1.00	40.18	BBBB
ATOM	4602	CA	LEU	B	98	-25.929	93.277	3.533	1.00	41.20	BBBB
ATOM	4603	CB	LEU	B	98	-26.925	92.620	4.479	1.00	41.33	BBBB
ATOM	4604	CG	LEU	B	98	-26.601	91.186	4.875	1.00	42.90	BBBB
ATOM	4605	CD1	LEU	B	98	-27.601	90.721	5.932	1.00	41.80	BBBB
ATOM	4606	CD2	LEU	B	98	-26.624	90.307	3.644	1.00	40.29	BBBB
ATOM	4607	C	LEU	B	98	-26.444	94.686	3.266	1.00	42.77	BBBB
ATOM	4608	O	LEU	B	98	-26.367	95.566	4.126	1.00	42.58	BBBB
ATOM	4609	N	SER	B	99	-27.013	94.860	2.072	1.00	44.07	BBBB
ATOM	4610	CA	SER	B	99	-27.636	96.115	1.634	1.00	43.49	BBBB
ATOM	4611	CB	SER	B	99	-29.022	96.267	2.281	1.00	42.90	BBBB
ATOM	4612	OG	SER	B	99	-29.770	95.058	2.217	1.00	45.09	BBBB
ATOM	4613	C	SER	B	99	-26.829	97.338	1.963	1.00	43.69	BBBB
ATOM	4614	O	SER	B	99	-27.286	98.191	2.702	1.00	45.84	BBBB
ATOM	4615	N	ASN	B	100	-25.639	97.445	1.403	1.00	45.90	BBBB
ATOM	4616	CA	ASN	B	100	-24.801	98.591	1.687	1.00	48.44	BBBB
ATOM	4617	CB	ASN	B	100	-23.388	98.105	2.016	1.00	49.23	BBBB
ATOM	4618	CG	ASN	B	100	-23.381	97.146	3.205	1.00	48.22	BBBB
ATOM	4619	OD1	ASN	B	100	-23.935	97.460	4.251	1.00	49.17	BBBB
ATOM	4620	ND2	ASN	B	100	-22.774	95.979	3.043	1.00	46.97	BBBB
ATOM	4621	C	ASN	B	100	-24.801	99.602	0.558	1.00	51.52	BBBB
ATOM	4622	O	ASN	B	100	-23.842	99.702	-0.212	1.00	51.65	BBBB
ATOM	4623	N	TYR	B	101	-25.897	100.353	0.473	1.00	55.58	BBBB
ATOM	4624	CA	TYR	B	101	-26.067	101.382	-0.551	1.00	60.68	BBBB
ATOM	4625	CB	TYR	B	101	-26.329	100.736	-1.907	1.00	58.10	BBBB
ATOM	4626	CG	TYR	B	101	-27.669	100.050	-1.973	1.00	56.83	BBBB
ATOM	4627	CD1	TYR	B	101	-28.776	100.690	-2.530	1.00	56.30	BBBB
ATOM	4628	CE1	TYR	B	101	-30.023	100.082	-2.536	1.00	54.54	BBBB
ATOM	4629	CD2	TYR	B	101	-27.847	98.784	-1.427	1.00	55.12	BBBB
ATOM	4630	CE2	TYR	B	101	-29.090	98.170	-1.426	1.00	53.97	BBBB
ATOM	4631	CZ	TYR	B	101	-30.171	98.824	-1.981	1.00	54.07	BBBB
ATOM	4632	OH	TYR	B	101	-31.406	98.225	-1.966	1.00	54.99	BBBB
ATOM	4633	C	TYR	B	101	-27.236	102.305	-0.204	1.00	64.67	BBBB
ATOM	4634	O	TYR	B	101	-28.208	101.886	0.438	1.00	65.31	BBBB
ATOM	4635	N	ASP	B	102	-27.134	103.557	-0.640	1.00	68.49	BBBB
ATOM	4636	CA	ASP	B	102	-28.169	104.555	-0.393	1.00	72.63	BBBB
ATOM	4637	CB	ASP	B	102	-27.596	105.968	-0.565	1.00	72.49	BBBB
ATOM	4638	CG	ASP	B	102	-26.724	106.098	-1.803	1.00	73.86	BBBB
ATOM	4639	OD1	ASP	B	102	-27.123	105.573	-2.865	1.00	74.76	BBBB
ATOM	4640	OD2	ASP	B	102	-25.643	106.727	-1.719	1.00	72.76	BBBB
ATOM	4641	C	ASP	B	102	-29.341	104.353	-1.347	1.00	75.37	BBBB
ATOM	4642	O	ASP	B	102	-29.906	103.258	-1.425	1.00	76.35	BBBB
ATOM	4643	N	ALA	B	103	-29.695	105.411	-2.075	1.00	77.78	BBBB
ATOM	4644	CA	ALA	B	103	-30.804	105.373	-3.025	1.00	79.29	BBBB
ATOM	4645	CB	ALA	B	103	-31.557	106.695	-2.994	1.00	78.26	BBBB

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ATOM	4646	C	ALA	B	103	-30.333	105.083	-4.447	1.00	80.41	BBBB
ATOM	4647	O	ALA	B	103	-30.642	104.027	-5.011	1.00	81.20	BBBB
ATOM	4648	N	ASN	B	104	-29.581	106.026	-5.013	1.00	80.61	BBBB
ATOM	4649	CA	ASN	B	104	-29.065	105.916	-6.380	1.00	81.29	BBBB
ATOM	4650	CB	ASN	B	104	-28.580	107.291	-6.862	1.00	82.46	BBBB
ATOM	4651	CG	ASN	B	104	-27.643	107.969	-5.871	1.00	82.49	BBBB
ATOM	4652	OD1	ASN	B	104	-27.225	109.110	-6.078	1.00	82.91	BBBB
ATOM	4653	ND2	ASN	B	104	-27.312	107.273	-4.791	1.00	81.62	BBBB
ATOM	4654	C	ASN	B	104	-27.955	104.887	-6.589	1.00	80.84	BBBB
ATOM	4655	O	ASN	B	104	-26.962	105.169	-7.261	1.00	80.88	BBBB
ATOM	4656	N	LYS	B	105	-28.135	103.692	-6.033	1.00	80.14	BBBB
ATOM	4657	CA	LYS	B	105	-27.142	102.628	-6.161	1.00	79.17	BBBB
ATOM	4658	CB	LYS	B	105	-27.145	102.056	-7.587	1.00	81.07	BBBB
ATOM	4659	CG	LYS	B	105	-28.340	101.166	-7.930	1.00	82.51	BBBB
ATOM	4660	CD	LYS	B	105	-29.637	101.959	-8.045	1.00	84.76	BBBB
ATOM	4661	CE	LYS	B	105	-30.783	101.080	-8.547	1.00	85.10	BBBB
ATOM	4662	NZ	LYS	B	105	-32.066	101.824	-8.716	1.00	83.62	BBBB
ATOM	4663	C	LYS	B	105	-25.732	103.106	-5.800	1.00	77.06	BBBB
ATOM	4664	O	LYS	B	105	-24.759	102.807	-6.498	1.00	77.14	BBBB
ATOM	4665	N	THR	B	106	-25.633	103.862	-4.712	1.00	73.98	BBBB
ATOM	4666	CA	THR	B	106	-24.349	104.368	-4.239	1.00	70.90	BBBB
ATOM	4667	CB	THR	B	106	-24.377	105.898	-4.070	1.00	72.66	BBBB
ATOM	4668	OG1	THR	B	106	-24.736	106.510	-5.315	1.00	75.33	BBBB
ATOM	4669	CG2	THR	B	106	-23.013	106.412	-3.639	1.00	74.16	BBBB
ATOM	4670	C	THR	B	106	-24.091	103.723	-2.882	1.00	66.88	BBBB
ATOM	4671	O	THR	B	106	-24.946	103.756	-1.997	1.00	66.07	BBBB
ATOM	4672	N	GLY	B	107	-22.920	103.128	-2.712	1.00	61.92	BBBB
ATOM	4673	CA	GLY	B	107	-22.645	102.483	-1.445	1.00	56.83	BBBB
ATOM	4674	C	GLY	B	107	-21.236	101.962	-1.300	1.00	52.70	BBBB
ATOM	4675	O	GLY	B	107	-20.300	102.476	-1.909	1.00	50.41	BBBB
ATOM	4676	N	LEU	B	108	-21.095	100.932	-0.478	1.00	49.74	BBBB
ATOM	4677	CA	LEU	B	108	-19.798	100.328	-0.217	1.00	47.30	BBBB
ATOM	4678	CB	LEU	B	108	-19.963	99.122	0.720	1.00	46.02	BBBB
ATOM	4679	CG	LEU	B	108	-18.666	98.472	1.204	1.00	45.49	BBBB
ATOM	4680	CD1	LEU	B	108	-17.889	99.473	2.027	1.00	45.39	BBBB
ATOM	4681	CD2	LEU	B	108	-18.967	97.241	2.020	1.00	46.00	BBBB
ATOM	4682	C	LEU	B	108	-19.162	99.887	-1.527	1.00	44.95	BBBB
ATOM	4683	O	LEU	B	108	-19.817	99.287	-2.363	1.00	44.03	BBBB
ATOM	4684	N	LYS	B	109	-17.885	100.180	-1.701	1.00	43.95	BBBB
ATOM	4685	CA	LYS	B	109	-17.207	99.797	-2.923	1.00	45.52	BBBB
ATOM	4686	CB	LYS	B	109	-16.845	101.041	-3.743	1.00	48.22	BBBB
ATOM	4687	CG	LYS	B	109	-16.297	100.734	-5.134	1.00	53.19	BBBB
ATOM	4688	CD	LYS	B	109	-15.822	102.000	-5.862	1.00	56.53	BBBB
ATOM	4689	CE	LYS	B	109	-14.613	102.630	-5.157	1.00	59.64	BBBB
ATOM	4690	NZ	LYS	B	109	-14.127	103.881	-5.825	1.00	59.80	BBBB
ATOM	4691	C	LYS	B	109	-15.943	99.018	-2.626	1.00	43.85	BBBB
ATOM	4692	O	LYS	B	109	-15.625	98.061	-3.311	1.00	43.22	BBBB
ATOM	4693	N	GLU	B	110	-15.225	99.445	-1.601	1.00	43.26	BBBB
ATOM	4694	CA	GLU	B	110	-13.972	98.815	-1.223	1.00	42.93	BBBB
ATOM	4695	CB	GLU	B	110	-12.852	99.858	-1.261	1.00	41.19	BBBB
ATOM	4696	CG	GLU	B	110	-12.720	100.616	-2.583	1.00	42.88	BBBB
ATOM	4697	CD	GLU	B	110	-11.683	101.750	-2.530	1.00	43.28	BBBB
ATOM	4698	OE1	GLU	B	110	-11.215	102.194	-3.599	1.00	44.28	BBBB
ATOM	4699	OE2	GLU	B	110	-11.341	102.209	-1.424	1.00	42.95	BBBB
ATOM	4700	C	GLU	B	110	-14.026	98.162	0.170	1.00	44.20	BBBB
ATOM	4701	O	GLU	B	110	-14.114	98.857	1.194	1.00	44.29	BBBB
ATOM	4702	N	LEU	B	111	-13.984	96.828	0.191	1.00	42.27	BBBB
ATOM	4703	CA	LEU	B	111	-13.989	96.037	1.428	1.00	40.51	BBBB
ATOM	4704	CB	LEU	B	111	-15.271	95.192	1.509	1.00	37.18	BBBB
ATOM	4705	CG	LEU	B	111	-15.477	94.245	2.699	1.00	38.53	BBBB
ATOM	4706	CD1	LEU	B	111	-15.595	95.028	3.992	1.00	35.62	BBBB
ATOM	4707	CD2	LEU	B	111	-16.736	93.422	2.486	1.00	38.83	BBBB
ATOM	4708	C	LEU	B	111	-12.753	95.130	1.316	1.00	39.38	BBBB
ATOM	4709	O	LEU	B	111	-12.865	93.908	1.288	1.00	42.51	BBBB
ATOM	4710	N	PRO	B	112	-11.557	95.725	1.255	1.00	36.35	BBBB
ATOM	4711	CD	PRO	B	112	-11.296	97.161	1.457	1.00	34.17	BBBB
ATOM	4712	CA	PRO	B	112	-10.303	94.972	1.127	1.00	37.14	BBBB
ATOM	4713	CB	PRO	B	112	-9.296	96.064	0.791	1.00	35.39	BBBB
ATOM	4714	CG	PRO	B	112	-9.792	97.213	1.650	1.00	35.36	BBBB
ATOM	4715	C	PRO	B	112	-9.852	94.109	2.316	1.00	38.61	BBBB
ATOM	4716	O	PRO	B	112	-8.891	94.451	3.021	1.00	39.63	BBBB
ATOM	4717	N	MET	B	113	-10.532	92.989	2.533	1.00	37.25	BBBB
ATOM	4718	CA	MET	B	113	-10.165	92.080	3.612	1.00	37.71	BBBB
ATOM	4719	CB	MET	B	113	-11.411	91.311	4.074	1.00	37.14	BBBB
ATOM	4720	CG	MET	B	113	-12.540	92.254	4.482	1.00	35.66	BBBB

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ATOM	4721	SD	MET	B	113	-13.924	91.504	5.337	1.00	36.14	BBBB
ATOM	4722	CE	MET	B	113	-14.398	90.291	4.138	1.00	35.85	BBBB
ATOM	4723	C	MET	B	113	-9.047	91.140	3.107	1.00	39.20	BBBB
ATOM	4724	O	MET	B	113	-9.193	89.917	3.055	1.00	37.57	BBBB
ATOM	4725	N	ARG	B	114	-7.928	91.766	2.746	1.00	40.53	BBBB
ATOM	4726	CA	ARG	B	114	-6.732	91.131	2.199	1.00	42.71	BBBB
ATOM	4727	CB	ARG	B	114	-5.720	92.213	1.843	1.00	43.49	BBBB
ATOM	4728	CG	ARG	B	114	-5.335	93.008	3.088	1.00	47.26	BBBB
ATOM	4729	CD	ARG	B	114	-4.210	93.997	2.884	1.00	47.49	BBBB
ATOM	4730	NE	ARG	B	114	-4.559	95.038	1.935	1.00	50.83	BBBB
ATOM	4731	CZ	ARG	B	114	-4.207	96.310	2.063	1.00	51.46	BBBB
ATOM	4732	NH1	ARG	B	114	-3.496	96.702	3.115	1.00	50.88	BBBB
ATOM	4733	NH2	ARG	B	114	-4.549	97.180	1.124	1.00	52.84	BBBB
ATOM	4734	C	ARG	B	114	-6.026	90.126	3.103	1.00	43.99	BBBB
ATOM	4735	O	ARG	B	114	-4.987	89.581	2.717	1.00	45.79	BBBB
ATOM	4736	N	ASN	B	115	-6.549	89.898	4.301	1.00	42.37	BBBB
ATOM	4737	CA	ASN	B	115	-5.934	88.952	5.225	1.00	41.86	BBBB
ATOM	4738	CB	ASN	B	115	-5.256	89.702	6.381	1.00	41.29	BBBB
ATOM	4739	CG	ASN	B	115	-3.921	90.325	5.974	1.00	41.79	BBBB
ATOM	4740	OD1	ASN	B	115	-2.977	89.617	5.631	1.00	41.21	BBBB
ATOM	4741	ND2	ASN	B	115	-3.842	91.651	6.008	1.00	43.32	BBBB
ATOM	4742	C	ASN	B	115	-6.931	87.940	5.773	1.00	42.94	BBBB
ATOM	4743	O	ASN	B	115	-6.551	86.940	6.366	1.00	46.00	BBBB
ATOM	4744	N	LEU	B	116	-8.215	88.200	5.583	1.00	42.55	BBBB
ATOM	4745	CA	LEU	B	116	-9.231	87.285	6.059	1.00	41.84	BBBB
ATOM	4746	CB	LEU	B	116	-10.616	87.789	5.684	1.00	37.86	BBBB
ATOM	4747	CG	LEU	B	116	-11.740	86.839	6.058	1.00	37.21	BBBB
ATOM	4748	CD1	LEU	B	116	-11.855	86.748	7.580	1.00	37.01	BBBB
ATOM	4749	CD2	LEU	B	116	-13.034	87.342	5.451	1.00	37.20	BBBB
ATOM	4750	C	LEU	B	116	-8.976	85.943	5.390	1.00	44.16	BBBB
ATOM	4751	O	LEU	B	116	-9.349	85.724	4.237	1.00	45.34	BBBB
ATOM	4752	N	GLN	B	117	-8.334	85.040	6.113	1.00	45.78	BBBB
ATOM	4753	CA	GLN	B	117	-8.047	83.742	5.548	1.00	46.67	BBBB
ATOM	4754	CB	GLN	B	117	-6.539	83.527	5.556	1.00	47.11	BBBB
ATOM	4755	CG	GLN	B	117	-5.890	84.405	4.500	1.00	48.45	BBBB
ATOM	4756	CD	GLN	B	117	-4.447	84.696	4.768	1.00	50.40	BBBB
ATOM	4757	OE1	GLN	B	117	-4.084	85.114	5.870	1.00	52.68	BBBB
ATOM	4758	NE2	GLN	B	117	-3.605	84.497	3.759	1.00	51.31	BBBB
ATOM	4759	C	GLN	B	117	-8.793	82.595	6.205	1.00	46.50	BBBB
ATOM	4760	O	GLN	B	117	-8.794	81.479	5.693	1.00	46.81	BBBB
ATOM	4761	N	GLU	B	118	-9.486	82.878	7.302	1.00	45.49	BBBB
ATOM	4762	CA	GLU	B	118	-10.214	81.825	7.978	1.00	44.03	BBBB
ATOM	4763	CB	GLU	B	118	-9.296	81.181	9.016	1.00	45.93	BBBB
ATOM	4764	CG	GLU	B	118	-9.926	80.062	9.800	1.00	45.76	BBBB
ATOM	4765	CD	GLU	B	118	-9.362	78.718	9.420	1.00	47.93	BBBB
ATOM	4766	OE1	GLU	B	118	-8.111	78.595	9.396	1.00	45.04	BBBB
ATOM	4767	OE2	GLU	B	118	-10.170	77.794	9.157	1.00	48.53	BBBB
ATOM	4768	C	GLU	B	118	-11.507	82.252	8.654	1.00	43.99	BBBB
ATOM	4769	O	GLU	B	118	-11.579	83.292	9.307	1.00	43.19	BBBB
ATOM	4770	N	ILE	B	119	-12.525	81.416	8.496	1.00	45.31	BBBB
ATOM	4771	CA	ILE	B	119	-13.827	81.621	9.118	1.00	46.92	BBBB
ATOM	4772	CB	ILE	B	119	-14.939	81.988	8.097	1.00	44.93	BBBB
ATOM	4773	CG2	ILE	B	119	-16.287	82.037	8.799	1.00	43.65	BBBB
ATOM	4774	CG1	ILE	B	119	-14.646	83.339	7.447	1.00	43.05	BBBB
ATOM	4775	CD1	ILE	B	119	-15.807	83.882	6.658	1.00	42.27	BBBB
ATOM	4776	C	ILE	B	119	-14.141	80.253	9.687	1.00	49.30	BBBB
ATOM	4777	O	ILE	B	119	-14.980	79.539	9.151	1.00	52.83	BBBB
ATOM	4778	N	LEU	B	120	-13.440	79.893	10.758	1.00	51.66	BBBB
ATOM	4779	CA	LEU	B	120	-13.582	78.602	11.431	1.00	52.26	BBBB
ATOM	4780	CB	LEU	B	120	-13.074	78.700	12.863	1.00	53.27	BBBB
ATOM	4781	CG	LEU	B	120	-11.609	79.071	12.996	1.00	53.79	BBBB
ATOM	4782	CD1	LEU	B	120	-11.272	79.263	14.465	1.00	56.21	BBBB
ATOM	4783	CD2	LEU	B	120	-10.760	77.978	12.369	1.00	55.02	BBBB
ATOM	4784	C	LEU	B	120	-14.977	78.023	11.459	1.00	53.13	BBBB
ATOM	4785	O	LEU	B	120	-15.171	76.846	11.172	1.00	55.10	BBBB
ATOM	4786	N	HIS	B	121	-15.954	78.836	11.824	1.00	53.83	BBBB
ATOM	4787	CA	HIS	B	121	-17.316	78.344	11.872	1.00	55.84	BBBB
ATOM	4788	CB	HIS	B	121	-17.737	78.175	13.330	1.00	58.57	BBBB
ATOM	4789	CG	HIS	B	121	-16.898	77.188	14.087	1.00	65.05	BBBB
ATOM	4790	CD2	HIS	B	121	-16.032	77.355	15.116	1.00	65.79	BBBB
ATOM	4791	ND1	HIS	B	121	-16.879	75.842	13.786	1.00	67.29	BBBB
ATOM	4792	CE1	HIS	B	121	-16.038	75.222	14.597	1.00	67.99	BBBB
ATOM	4793	NE2	HIS	B	121	-15.510	76.118	15.413	1.00	67.35	BBBB
ATOM	4794	C	HIS	B	121	-18.268	79.276	11.130	1.00	54.97	BBBB
ATOM	4795	O	HIS	B	121	-17.949	80.437	10.907	1.00	54.08	BBBB

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ATOM	4796	N	GLY	B	122	-19.415	78.748	10.713	1.00	53.92	BBBB
ATOM	4797	CA	GLY	B	122	-20.407	79.564	10.037	1.00	54.50	BBBB
ATOM	4798	C	GLY	B	122	-20.272	79.840	8.550	1.00	55.53	BBBB
ATOM	4799	O	GLY	B	122	-19.197	79.733	7.961	1.00	56.26	BBBB
ATOM	4800	N	ALA	B	123	-21.390	80.217	7.941	1.00	56.46	BBBB
ATOM	4801	CA	ALA	B	123	-21.429	80.519	6.518	1.00	57.24	BBBB
ATOM	4802	CB	ALA	B	123	-22.756	80.080	5.936	1.00	56.75	BBBB
ATOM	4803	C	ALA	B	123	-21.222	82.001	6.250	1.00	57.69	BBBB
ATOM	4804	O	ALA	B	123	-21.243	82.829	7.164	1.00	57.70	BBBB
ATOM	4805	N	VAL	B	124	-21.021	82.317	4.977	1.00	57.56	BBBB
ATOM	4806	CA	VAL	B	124	-20.824	83.682	4.532	1.00	57.01	BBBB
ATOM	4807	CB	VAL	B	124	-19.551	83.792	3.693	1.00	56.42	BBBB
ATOM	4808	CG1	VAL	B	124	-19.326	85.229	3.269	1.00	56.96	BBBB
ATOM	4809	CG2	VAL	B	124	-18.373	83.280	4.492	1.00	55.83	BBBB
ATOM	4810	C	VAL	B	124	-22.034	84.058	3.685	1.00	57.65	BBBB
ATOM	4811	O	VAL	B	124	-22.650	83.195	3.061	1.00	58.70	BBBB
ATOM	4812	N	ARG	B	125	-22.383	85.340	3.670	1.00	58.34	BBBB
ATOM	4813	CA	ARG	B	125	-23.529	85.798	2.894	1.00	56.99	BBBB
ATOM	4814	CB	ARG	B	125	-24.816	85.617	3.694	1.00	58.12	BBBB
ATOM	4815	CG	ARG	B	125	-25.996	86.378	3.122	1.00	59.56	BBBB
ATOM	4816	CD	ARG	B	125	-27.298	85.644	3.356	1.00	61.96	BBBB
ATOM	4817	NE	ARG	B	125	-28.416	86.321	2.708	1.00	65.48	BBBB
ATOM	4818	CZ	ARG	B	125	-29.011	87.410	3.184	1.00	67.53	BBBB
ATOM	4819	NH1	ARG	B	125	-28.605	87.961	4.322	1.00	67.92	BBBB
ATOM	4820	NH2	ARG	B	125	-30.017	87.953	2.519	1.00	69.10	BBBB
ATOM	4821	C	ARG	B	125	-23.454	87.239	2.426	1.00	55.73	BBBB
ATOM	4822	O	ARG	B	125	-23.581	88.163	3.224	1.00	55.11	BBBB
ATOM	4823	N	PHE	B	126	-23.251	87.414	1.124	1.00	55.93	BBBB
ATOM	4824	CA	PHE	B	126	-23.204	88.735	0.506	1.00	55.15	BBBB
ATOM	4825	CB	PHE	B	126	-22.048	88.828	-0.474	1.00	52.32	BBBB
ATOM	4826	CG	PHE	B	126	-20.733	89.080	0.179	1.00	52.87	BBBB
ATOM	4827	CD1	PHE	B	126	-20.143	88.111	0.978	1.00	53.18	BBBB
ATOM	4828	CD2	PHE	B	126	-20.082	90.297	0.005	1.00	52.86	BBBB
ATOM	4829	CE1	PHE	B	126	-18.915	88.350	1.596	1.00	53.31	BBBB
ATOM	4830	CE2	PHE	B	126	-18.857	90.549	0.617	1.00	53.38	BBBB
ATOM	4831	CZ	PHE	B	126	-18.272	89.572	1.414	1.00	52.98	BBBB
ATOM	4832	C	PHE	B	126	-24.524	88.950	-0.220	1.00	55.55	BBBB
ATOM	4833	O	PHE	B	126	-25.099	88.010	-0.760	1.00	55.27	BBBB
ATOM	4834	N	SER	B	127	-25.009	90.185	-0.233	1.00	56.38	BBBB
ATOM	4835	CA	SER	B	127	-26.289	90.462	-0.872	1.00	56.14	BBBB
ATOM	4836	CB	SER	B	127	-27.383	89.646	-0.178	1.00	56.36	BBBB
ATOM	4837	OG	SER	B	127	-28.649	90.237	-0.380	1.00	58.63	BBBB
ATOM	4838	C	SER	B	127	-26.687	91.939	-0.893	1.00	55.25	BBBB
ATOM	4839	O	SER	B	127	-26.644	92.631	0.126	1.00	54.09	BBBB
ATOM	4840	N	ASN	B	128	-27.084	92.399	-2.074	1.00	53.89	BBBB
ATOM	4841	CA	ASN	B	128	-27.510	93.774	-2.294	1.00	53.43	BBBB
ATOM	4842	CB	ASN	B	128	-28.716	94.131	-1.429	1.00	54.98	BBBB
ATOM	4843	CG	ASN	B	128	-29.907	93.264	-1.716	1.00	59.01	BBBB
ATOM	4844	OD1	ASN	B	128	-30.994	93.498	-1.193	1.00	62.44	BBBB
ATOM	4845	ND2	ASN	B	128	-29.713	92.242	-2.545	1.00	60.25	BBBB
ATOM	4846	C	ASN	B	128	-26.432	94.790	-2.037	1.00	51.62	BBBB
ATOM	4847	O	ASN	B	128	-26.624	95.711	-1.250	1.00	52.05	BBBB
ATOM	4848	N	ASN	B	129	-25.302	94.639	-2.705	1.00	49.60	BBBB
ATOM	4849	CA	ASN	B	129	-24.224	95.593	-2.532	1.00	50.71	BBBB
ATOM	4850	CB	ASN	B	129	-23.028	94.886	-1.892	1.00	50.65	BBBB
ATOM	4851	CG	ASN	B	129	-23.399	94.233	-0.567	1.00	50.68	BBBB
ATOM	4852	OD1	ASN	B	129	-23.833	94.907	0.365	1.00	49.95	BBBB
ATOM	4853	ND2	ASN	B	129	-23.256	92.916	-0.488	1.00	51.25	BBBB
ATOM	4854	C	ASN	B	129	-23.924	96.167	-3.915	1.00	51.09	BBBB
ATOM	4855	O	ASN	B	129	-22.837	96.004	-4.465	1.00	50.80	BBBB
ATOM	4856	N	PRO	B	130	-24.916	96.877	-4.481	1.00	52.04	BBBB
ATOM	4857	CD	PRO	B	130	-26.083	97.322	-3.690	1.00	52.20	BBBB
ATOM	4858	CA	PRO	B	130	-24.928	97.532	-5.789	1.00	50.19	BBBB
ATOM	4859	CB	PRO	B	130	-26.035	98.570	-5.640	1.00	51.13	BBBB
ATOM	4860	CG	PRO	B	130	-27.009	97.877	-4.749	1.00	50.78	BBBB
ATOM	4861	C	PRO	B	130	-23.629	98.157	-6.235	1.00	49.43	BBBB
ATOM	4862	O	PRO	B	130	-23.409	98.324	-7.432	1.00	51.44	BBBB
ATOM	4863	N	ALA	B	131	-22.758	98.492	-5.292	1.00	47.13	BBBB
ATOM	4864	CA	ALA	B	131	-21.504	99.133	-5.657	1.00	44.63	BBBB
ATOM	4865	CB	ALA	B	131	-21.432	100.492	-4.996	1.00	43.20	BBBB
ATOM	4866	C	ALA	B	131	-20.248	98.353	-5.335	1.00	43.92	BBBB
ATOM	4867	O	ALA	B	131	-19.155	98.795	-5.666	1.00	42.82	BBBB
ATOM	4868	N	LEU	B	132	-20.402	97.192	-4.707	1.00	46.29	BBBB
ATOM	4869	CA	LEU	B	132	-19.254	96.379	-4.280	1.00	47.15	BBBB
ATOM	4870	CB	LEU	B	132	-19.733	95.255	-3.363	1.00	45.86	BBBB

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ATOM	4871	CG	LEU	B	132	-18.611	94.617	-2.545	1.00	45.84	BBBB
ATOM	4872	CD1	LEU	B	132	-17.713	95.687	-1.940	1.00	43.20	BBBB
ATOM	4873	CD2	LEU	B	132	-19.232	93.757	-1.467	1.00	46.84	BBBB
ATOM	4874	C	LEU	B	132	-18.339	95.796	-5.353	1.00	47.03	BBBB
ATOM	4875	O	LEU	B	132	-18.761	94.988	-6.169	1.00	49.55	BBBB
ATOM	4876	N	CYS	B	133	-17.071	96.188	-5.301	1.00	46.67	BBBB
ATOM	4877	CA	CYS	B	133	-16.060	95.756	-6.256	1.00	47.56	BBBB
ATOM	4878	C	CYS	B	133	-15.140	94.615	-5.807	1.00	47.98	BBBB
ATOM	4879	O	CYS	B	133	-15.023	94.317	-4.619	1.00	47.13	BBBB
ATOM	4880	CB	CYS	B	133	-15.180	96.948	-6.643	1.00	50.84	BBBB
ATOM	4881	SG	CYS	B	133	-15.962	98.187	-7.732	1.00	55.97	BBBB
ATOM	4882	N	ASN	B	134	-14.479	94.000	-6.790	1.00	46.92	BBBB
ATOM	4883	CA	ASN	B	134	-13.527	92.905	-6.587	1.00	44.92	BBBB
ATOM	4884	CB	ASN	B	134	-12.280	93.448	-5.905	1.00	44.68	BBBB
ATOM	4885	CG	ASN	B	134	-11.664	94.610	-6.658	1.00	45.74	BBBB
ATOM	4886	OD1	ASN	B	134	-11.217	94.461	-7.791	1.00	45.46	BBBB
ATOM	4887	ND2	ASN	B	134	-11.635	95.775	-6.029	1.00	45.30	BBBB
ATOM	4888	C	ASN	B	134	-13.996	91.648	-5.840	1.00	44.29	BBBB
ATOM	4889	O	ASN	B	134	-13.952	90.545	-6.381	1.00	42.79	BBBB
ATOM	4890	N	VAL	B	135	-14.432	91.814	-4.598	1.00	43.28	BBBB
ATOM	4891	CA	VAL	B	135	-14.871	90.693	-3.773	1.00	42.01	BBBB
ATOM	4892	CB	VAL	B	135	-15.923	91.164	-2.716	1.00	39.61	BBBB
ATOM	4893	CG1	VAL	B	135	-16.339	90.013	-1.816	1.00	37.26	BBBB
ATOM	4894	CG2	VAL	B	135	-15.328	92.259	-1.865	1.00	36.16	BBBB
ATOM	4895	C	VAL	B	135	-15.396	89.459	-4.527	1.00	42.61	BBBB
ATOM	4896	O	VAL	B	135	-15.121	88.337	-4.118	1.00	43.35	BBBB
ATOM	4897	N	GLU	B	136	-16.126	89.644	-5.623	1.00	43.47	BBBB
ATOM	4898	CA	GLU	B	136	-16.649	88.488	-6.372	1.00	45.43	BBBB
ATOM	4899	CB	GLU	B	136	-17.531	88.949	-7.563	1.00	44.18	BBBB
ATOM	4900	CG	GLU	B	136	-16.819	89.433	-8.838	1.00	44.47	BBBB
ATOM	4901	CD	GLU	B	136	-15.899	90.648	-8.639	1.00	47.18	BBBB
ATOM	4902	OE1	GLU	B	136	-16.181	91.478	-7.739	1.00	49.37	BBBB
ATOM	4903	OE2	GLU	B	136	-14.902	90.783	-9.400	1.00	44.04	BBBB
ATOM	4904	C	GLU	B	136	-15.549	87.519	-6.861	1.00	45.81	BBBB
ATOM	4905	O	GLU	B	136	-15.801	86.328	-7.043	1.00	45.64	BBBB
ATOM	4906	N	SER	B	137	-14.334	88.029	-7.047	1.00	46.09	BBBB
ATOM	4907	CA	SER	B	137	-13.208	87.217	-7.499	1.00	48.19	BBBB
ATOM	4908	CB	SER	B	137	-12.050	88.115	-7.933	1.00	48.12	BBBB
ATOM	4909	OG	SER	B	137	-11.292	88.567	-6.817	1.00	45.96	BBBB
ATOM	4910	C	SER	B	137	-12.692	86.281	-6.401	1.00	51.27	BBBB
ATOM	4911	O	SER	B	137	-11.990	85.302	-6.676	1.00	53.42	BBBB
ATOM	4912	N	ILE	B	138	-13.028	86.592	-5.156	1.00	51.71	BBBB
ATOM	4913	CA	ILE	B	138	-12.577	85.794	-4.029	1.00	51.89	BBBB
ATOM	4914	CB	ILE	B	138	-13.026	86.439	-2.681	1.00	49.98	BBBB
ATOM	4915	CG2	ILE	B	138	-12.839	85.471	-1.531	1.00	49.45	BBBB
ATOM	4916	CG1	ILE	B	138	-12.239	87.731	-2.435	1.00	48.61	BBBB
ATOM	4917	CD1	ILE	B	138	-10.737	87.604	-2.657	1.00	45.12	BBBB
ATOM	4918	C	ILE	B	138	-13.053	84.347	-4.088	1.00	53.74	BBBB
ATOM	4919	O	ILE	B	138	-14.207	84.070	-4.432	1.00	52.61	BBBB
ATOM	4920	N	GLN	B	139	-12.128	83.440	-3.766	1.00	55.71	BBBB
ATOM	4921	CA	GLN	B	139	-12.372	81.999	-3.710	1.00	57.08	BBBB
ATOM	4922	CB	GLN	B	139	-11.147	81.221	-4.197	1.00	57.19	BBBB
ATOM	4923	CG	GLN	B	139	-10.490	81.771	-5.453	1.00	56.56	BBBB
ATOM	4924	CD	GLN	B	139	-9.419	80.845	-5.992	1.00	56.64	BBBB
ATOM	4925	OE1	GLN	B	139	-9.699	79.695	-6.351	1.00	55.35	BBBB
ATOM	4926	NE2	GLN	B	139	-8.182	81.338	-6.051	1.00	54.43	BBBB
ATOM	4927	C	GLN	B	139	-12.560	81.734	-2.223	1.00	59.11	BBBB
ATOM	4928	O	GLN	B	139	-11.594	81.749	-1.452	1.00	58.67	BBBB
ATOM	4929	N	TRP	B	140	-13.798	81.504	-1.809	1.00	60.75	BBBB
ATOM	4930	CA	TRP	B	140	-14.067	81.285	-0.400	1.00	62.57	BBBB
ATOM	4931	CB	TRP	B	140	-15.514	81.667	-0.090	1.00	63.54	BBBB
ATOM	4932	CG	TRP	B	140	-15.807	83.111	-0.360	1.00	64.18	BBBB
ATOM	4933	CD2	TRP	B	140	-15.685	84.197	0.569	1.00	65.34	BBBB
ATOM	4934	CE2	TRP	B	140	-16.023	85.378	-0.125	1.00	65.23	BBBB
ATOM	4935	CE3	TRP	B	140	-15.320	84.285	1.923	1.00	64.32	BBBB
ATOM	4936	CD1	TRP	B	140	-16.204	83.661	-1.543	1.00	64.07	BBBB
ATOM	4937	NE1	TRP	B	140	-16.337	85.022	-1.411	1.00	65.04	BBBB
ATOM	4938	CZ2	TRP	B	140	-16.009	86.637	0.488	1.00	64.12	BBBB
ATOM	4939	CZ3	TRP	B	140	-15.307	85.532	2.529	1.00	63.40	BBBB
ATOM	4940	CH2	TRP	B	140	-15.650	86.692	1.810	1.00	64.40	BBBB
ATOM	4941	C	TRP	B	140	-13.781	79.872	0.088	1.00	63.61	BBBB
ATOM	4942	O	TRP	B	140	-13.931	79.574	1.275	1.00	63.10	BBBB
ATOM	4943	N	ARG	B	141	-13.352	79.010	-0.828	1.00	64.22	BBBB
ATOM	4944	CA	ARG	B	141	-13.065	77.627	-0.488	1.00	64.16	BBBB
ATOM	4945	CB	ARG	B	141	-12.958	76.792	-1.766	1.00	66.58	BBBB

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ATOM	4946	CG	ARG	B	141	-13.015	75.290	-1.538	1.00	69.36	BBBB
ATOM	4947	CD	ARG	B	141	-12.947	74.520	-2.847	0.01	69.95	BBBB
ATOM	4948	NE	ARG	B	141	-14.090	74.803	-3.710	0.01	71.08	BBBB
ATOM	4949	CZ	ARG	B	141	-14.288	74.238	-4.896	0.01	71.57	BBBB
ATOM	4950	NH1	ARG	B	141	-13.417	73.355	-5.365	0.01	71.93	BBBB
ATOM	4951	NH2	ARG	B	141	-15.357	74.554	-5.614	0.01	71.93	BBBB
ATOM	4952	C	ARG	B	141	-11.786	77.507	0.336	1.00	63.56	BBBB
ATOM	4953	O	ARG	B	141	-11.601	76.524	1.052	1.00	64.93	BBBB
ATOM	4954	N	ASP	B	142	-10.919	78.514	0.237	1.00	61.53	BBBB
ATOM	4955	CA	ASP	B	142	-9.649	78.553	0.967	1.00	58.99	BBBB
ATOM	4956	CB	ASP	B	142	-8.586	79.256	0.101	1.00	58.24	BBBB
ATOM	4957	CG	ASP	B	142	-7.264	79.519	0.840	1.00	58.74	BBBB
ATOM	4958	OD1	ASP	B	142	-7.278	80.163	1.911	1.00	59.71	BBBB
ATOM	4959	OD2	ASP	B	142	-6.196	79.104	0.338	1.00	55.50	BBBB
ATOM	4960	C	ASP	B	142	-9.844	79.307	2.282	1.00	58.79	BBBB
ATOM	4961	O	ASP	B	142	-8.975	79.291	3.151	1.00	59.21	BBBB
ATOM	4962	N	ILE	B	143	-11.002	79.939	2.438	1.00	58.55	BBBB
ATOM	4963	CA	ILE	B	143	-11.290	80.734	3.629	1.00	59.40	BBBB
ATOM	4964	CB	ILE	B	143	-11.803	82.139	3.231	1.00	58.68	BBBB
ATOM	4965	CG2	ILE	B	143	-12.217	82.919	4.469	1.00	58.34	BBBB
ATOM	4966	CG1	ILE	B	143	-10.722	82.887	2.453	1.00	58.58	BBBB
ATOM	4967	CD1	ILE	B	143	-11.141	84.260	1.990	1.00	58.88	BBBB
ATOM	4968	C	ILE	B	143	-12.303	80.141	4.599	1.00	60.47	BBBB
ATOM	4969	O	ILE	B	143	-12.100	80.172	5.808	1.00	59.94	BBBB
ATOM	4970	N	VAL	B	144	-13.396	79.617	4.060	1.00	63.28	BBBB
ATOM	4971	CA	VAL	B	144	-14.470	79.056	4.864	1.00	66.68	BBBB
ATOM	4972	CB	VAL	B	144	-15.830	79.286	4.162	1.00	65.66	BBBB
ATOM	4973	CG1	VAL	B	144	-16.974	78.825	5.042	1.00	65.75	BBBB
ATOM	4974	CG2	VAL	B	144	-15.989	80.754	3.833	1.00	66.14	BBBB
ATOM	4975	C	VAL	B	144	-14.311	77.570	5.166	1.00	70.63	BBBB
ATOM	4976	O	VAL	B	144	-13.539	76.861	4.520	1.00	71.45	BBBB
ATOM	4977	N	SER	B	145	-15.049	77.110	6.168	1.00	74.71	BBBB
ATOM	4978	CA	SER	B	145	-15.027	75.716	6.564	1.00	79.26	BBBB
ATOM	4979	CB	SER	B	145	-15.797	75.531	7.869	1.00	79.64	BBBB
ATOM	4980	OG	SER	B	145	-15.866	74.164	8.227	1.00	81.38	BBBB
ATOM	4981	C	SER	B	145	-15.680	74.895	5.466	1.00	82.78	BBBB
ATOM	4982	O	SER	B	145	-16.727	75.273	4.938	1.00	83.31	BBBB
ATOM	4983	N	SER	B	146	-15.060	73.768	5.132	1.00	86.79	BBBB
ATOM	4984	CA	SER	B	146	-15.562	72.877	4.090	1.00	90.59	BBBB
ATOM	4985	CB	SER	B	146	-14.607	71.695	3.921	1.00	90.77	BBBB
ATOM	4986	OG	SER	B	146	-13.275	72.143	3.746	1.00	91.49	BBBB
ATOM	4987	C	SER	B	146	-16.970	72.355	4.386	1.00	92.92	BBBB
ATOM	4988	O	SER	B	146	-17.554	71.635	3.577	1.00	93.10	BBBB
ATOM	4989	N	ASP	B	147	-17.511	72.720	5.544	1.00	95.33	BBBB
ATOM	4990	CA	ASP	B	147	-18.840	72.272	5.932	1.00	98.36	BBBB
ATOM	4991	CB	ASP	B	147	-18.856	71.895	7.412	1.00	99.38	BBBB
ATOM	4992	CG	ASP	B	147	-17.835	70.831	7.753	1.00	100.49	BBBB
ATOM	4993	OD1	ASP	B	147	-17.780	70.421	8.931	1.00	101.56	BBBB
ATOM	4994	OD2	ASP	B	147	-17.086	70.405	6.848	1.00	101.00	BBBB
ATOM	4995	C	ASP	B	147	-19.901	73.331	5.683	1.00	100.44	BBBB
ATOM	4996	O	ASP	B	147	-21.099	73.046	5.766	1.00	100.78	BBBB
ATOM	4997	N	PHE	B	148	-19.466	74.550	5.381	1.00	102.29	BBBB
ATOM	4998	CA	PHE	B	148	-20.404	75.638	5.142	1.00	104.13	BBBB
ATOM	4999	CB	PHE	B	148	-20.186	76.762	6.162	1.00	103.77	BBBB
ATOM	5000	CG	PHE	B	148	-20.294	76.315	7.597	1.00	102.93	BBBB
ATOM	5001	CD1	PHE	B	148	-19.196	75.768	8.256	1.00	102.74	BBBB
ATOM	5002	CD2	PHE	B	148	-21.493	76.447	8.292	1.00	102.05	BBBB
ATOM	5003	CE1	PHE	B	148	-19.289	75.362	9.588	1.00	102.16	BBBB
ATOM	5004	CE2	PHE	B	148	-21.595	76.044	9.622	1.00	101.53	BBBB
ATOM	5005	CZ	PHE	B	148	-20.491	75.501	10.271	1.00	101.14	BBBB
ATOM	5006	C	PHE	B	148	-20.333	76.212	3.730	1.00	105.35	BBBB
ATOM	5007	O	PHE	B	148	-21.093	77.116	3.387	1.00	105.31	BBBB
ATOM	5008	N	LEU	B	149	-19.422	75.690	2.914	1.00	107.15	BBBB
ATOM	5009	CA	LEU	B	149	-19.280	76.163	1.539	1.00	108.87	BBBB
ATOM	5010	CB	LEU	B	149	-18.225	75.335	0.797	1.00	108.74	BBBB
ATOM	5011	CG	LEU	B	149	-16.762	75.591	1.173	1.00	109.18	BBBB
ATOM	5012	CD1	LEU	B	149	-15.864	74.549	0.525	1.00	109.17	BBBB
ATOM	5013	CD2	LEU	B	149	-16.363	76.995	0.734	1.00	109.07	BBBB
ATOM	5014	C	LEU	B	149	-20.613	76.075	0.804	1.00	110.12	BBBB
ATOM	5015	O	LEU	B	149	-20.925	76.913	-0.041	1.00	109.68	BBBB
ATOM	5016	N	SER	B	150	-21.395	75.053	1.138	1.00	112.26	BBBB
ATOM	5017	CA	SER	B	150	-22.698	74.845	0.516	1.00	114.47	BBBB
ATOM	5018	CB	SER	B	150	-23.034	73.350	0.484	1.00	114.42	BBBB
ATOM	5019	OG	SER	B	150	-23.004	72.790	1.786	1.00	115.03	BBBB
ATOM	5020	C	SER	B	150	-23.784	75.612	1.269	1.00	115.71	BBBB

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ATOM	5021	O	SER	B	150	-24.906	75.764	0.786	1.00116.46	BBBB
ATOM	5022	N	ASN	B	151	-23.443	76.092	2.459	1.00116.68	BBBB
ATOM	5023	CA	ASN	B	151	-24.379	76.856	3.271	1.00116.96	BBBB
ATOM	5024	CB	ASN	B	151	-23.991	76.740	4.748	1.00118.02	BBBB
ATOM	5025	CG	ASN	B	151	-25.184	76.831	5.676	1.00119.46	BBBB
ATOM	5026	OD1	ASN	B	151	-26.059	75.962	5.666	1.00120.20	BBBB
ATOM	5027	ND2	ASN	B	151	-25.228	77.885	6.486	1.00120.22	BBBB
ATOM	5028	C	ASN	B	151	-24.235	78.299	2.796	1.00116.67	BBBB
ATOM	5029	O	ASN	B	151	-25.007	79.183	3.166	1.00116.27	BBBB
ATOM	5030	N	MET	B	152	-23.230	78.501	1.951	1.00116.56	BBBB
ATOM	5031	CA	MET	B	152	-22.886	79.796	1.380	1.00116.72	BBBB
ATOM	5032	CB	MET	B	152	-21.659	79.626	0.486	1.00118.36	BBBB
ATOM	5033	CG	MET	B	152	-21.122	80.900	-0.128	1.00120.16	BBBB
ATOM	5034	SD	MET	B	152	-19.584	80.556	-0.998	1.00122.97	BBBB
ATOM	5035	CE	MET	B	152	-18.485	80.209	0.405	1.00121.57	BBBB
ATOM	5036	C	MET	B	152	-24.000	80.478	0.590	1.00115.97	BBBB
ATOM	5037	O	MET	B	152	-24.901	79.826	0.063	1.00116.12	BBBB
ATOM	5038	N	SER	B	153	-23.913	81.803	0.514	1.00114.66	BBBB
ATOM	5039	CA	SER	B	153	-24.882	82.620	-0.208	1.00113.03	BBBB
ATOM	5040	CB	SER	B	153	-26.016	83.043	0.726	1.00112.30	BBBB
ATOM	5041	OG	SER	B	153	-26.996	83.790	0.029	1.00111.51	BBBB
ATOM	5042	C	SER	B	153	-24.176	83.856	-0.762	1.00112.42	BBBB
ATOM	5043	O	SER	B	153	-24.596	84.987	-0.520	1.00111.93	BBBB
ATOM	5044	N	MET	B	154	-23.094	83.625	-1.500	1.00112.10	BBBB
ATOM	5045	CA	MET	B	154	-22.310	84.700	-2.101	1.00111.52	BBBB
ATOM	5046	CB	MET	B	154	-21.048	84.127	-2.750	1.00112.13	BBBB
ATOM	5047	CG	MET	B	154	-21.321	83.219	-3.959	1.00113.26	BBBB
ATOM	5048	SD	MET	B	154	-22.194	81.659	-3.586	1.00115.32	BBBB
ATOM	5049	CE	MET	B	154	-20.915	80.451	-3.905	1.00113.17	BBBB
ATOM	5050	C	MET	B	154	-23.127	85.431	-3.160	1.00110.94	BBBB
ATOM	5051	O	MET	B	154	-24.208	84.983	-3.537	1.00110.87	BBBB
ATOM	5052	N	ASP	B	155	-22.596	86.551	-3.640	1.00110.28	BBBB
ATOM	5053	CA	ASP	B	155	-23.249	87.363	-4.667	1.00110.21	BBBB
ATOM	5054	CB	ASP	B	155	-24.745	87.515	-4.380	1.00110.88	BBBB
ATOM	5055	CG	ASP	B	155	-25.610	86.882	-5.456	1.00111.81	BBBB
ATOM	5056	OD1	ASP	B	155	-25.511	85.652	-5.659	1.00111.60	BBBB
ATOM	5057	OD2	ASP	B	155	-26.388	87.617	-6.101	1.00112.10	BBBB
ATOM	5058	C	ASP	B	155	-22.596	88.735	-4.699	1.00109.74	BBBB
ATOM	5059	O	ASP	B	155	-22.377	89.349	-3.655	1.00110.48	BBBB
ATOM	5060	N	PHE	B	156	-22.273	89.219	-5.894	1.00108.48	BBBB
ATOM	5061	CA	PHE	B	156	-21.621	90.517	-6.011	1.00107.02	BBBB
ATOM	5062	CB	PHE	B	156	-20.106	90.337	-5.881	1.00108.17	BBBB
ATOM	5063	CG	PHE	B	156	-19.714	89.230	-4.942	1.00109.50	BBBB
ATOM	5064	CD1	PHE	B	156	-19.812	87.899	-5.341	1.00110.20	BBBB
ATOM	5065	CD2	PHE	B	156	-19.325	89.509	-3.639	1.00109.92	BBBB
ATOM	5066	CE1	PHE	B	156	-19.535	86.863	-4.454	1.00110.53	BBBB
ATOM	5067	CE2	PHE	B	156	-19.046	88.479	-2.745	1.00110.48	BBBB
ATOM	5068	CZ	PHE	B	156	-19.153	87.154	-3.154	1.00110.80	BBBB
ATOM	5069	C	PHE	B	156	-21.960	91.211	-7.325	1.00105.60	BBBB
ATOM	5070	O	PHE	B	156	-21.112	91.874	-7.928	1.00105.71	BBBB
ATOM	5071	N	GLN	B	157	-23.207	91.053	-7.762	1.00103.08	BBBB
ATOM	5072	CA	GLN	B	157	-23.679	91.667	-8.997	1.00100.31	BBBB
ATOM	5073	CB	GLN	B	157	-25.059	91.113	-9.340	1.00100.99	BBBB
ATOM	5074	CG	GLN	B	157	-25.028	89.611	-9.594	1.00101.56	BBBB
ATOM	5075	CD	GLN	B	157	-26.395	89.024	-9.859	1.00101.74	BBBB
ATOM	5076	OE1	GLN	B	157	-27.111	89.466	-10.757	1.00101.92	BBBB
ATOM	5077	NE2	GLN	B	157	-26.764	88.015	-9.080	1.00101.91	BBBB
ATOM	5078	C	GLN	B	157	-23.716	93.184	-8.827	1.00 97.69	BBBB
ATOM	5079	O	GLN	B	157	-24.554	93.724	-8.106	1.00 97.57	BBBB
ATOM	5080	N	ASN	B	158	-22.796	93.860	-9.509	1.00 94.46	BBBB
ATOM	5081	CA	ASN	B	158	-22.657	95.310	-9.414	1.00 91.18	BBBB
ATOM	5082	CB	ASN	B	158	-21.428	95.625	-8.570	1.00 91.04	BBBB
ATOM	5083	CG	ASN	B	158	-20.144	95.067	-9.182	1.00 90.57	BBBB
ATOM	5084	OD1	ASN	B	158	-19.046	95.532	-8.877	1.00 90.72	BBBB
ATOM	5085	ND2	ASN	B	158	-20.281	94.061	-10.042	1.00 89.01	BBBB
ATOM	5086	C	ASN	B	158	-22.500	96.025	-10.760	1.00 88.84	BBBB
ATOM	5087	O	ASN	B	158	-22.982	95.567	-11.792	1.00 88.90	BBBB
ATOM	5088	N	HIS	B	159	-21.818	97.168	-10.714	1.00 85.89	BBBB
ATOM	5089	CA	HIS	B	159	-21.524	97.972	-11.894	1.00 81.99	BBBB
ATOM	5090	CB	HIS	B	159	-21.607	99.462	-11.572	1.00 82.24	BBBB
ATOM	5091	CG	HIS	B	159	-21.122	100.345	-12.680	1.00 82.09	BBBB
ATOM	5092	CD2	HIS	B	159	-20.996	100.119	-14.009	1.00 82.10	BBBB
ATOM	5093	ND1	HIS	B	159	-20.701	101.641	-12.469	1.00 81.86	BBBB
ATOM	5094	CE1	HIS	B	159	-20.334	102.174	-13.621	1.00 82.63	BBBB
ATOM	5095	NE2	HIS	B	159	-20.504	101.271	-14.571	1.00 82.42	BBBB

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ATOM	5096	C	HIS	B	159	-20.091	97.636	-12.292	1.00	79.33	BBBB
ATOM	5097	O	HIS	B	159	-19.148	98.330	-11.903	1.00	77.67	BBBB
ATOM	5098	N	LEU	B	160	-19.943	96.563	-13.062	1.00	76.42	BBBB
ATOM	5099	CA	LEU	B	160	-18.644	96.089	-13.520	1.00	73.22	BBBB
ATOM	5100	CB	LEU	B	160	-18.845	95.099	-14.666	1.00	73.70	BBBB
ATOM	5101	CG	LEU	B	160	-19.569	93.818	-14.258	1.00	73.93	BBBB
ATOM	5102	CD1	LEU	B	160	-20.094	93.089	-15.480	1.00	74.36	BBBB
ATOM	5103	CD2	LEU	B	160	-18.609	92.950	-13.464	1.00	73.47	BBBB
ATOM	5104	C	LEU	B	160	-17.696	97.195	-13.957	1.00	70.59	BBBB
ATOM	5105	O	LEU	B	160	-16.484	97.090	-13.770	1.00	70.07	BBBB
ATOM	5106	N	GLY	B	161	-18.255	98.255	-14.529	1.00	68.54	BBBB
ATOM	5107	CA	GLY	B	161	-17.445	99.363	-15.010	1.00	66.49	BBBB
ATOM	5108	C	GLY	B	161	-16.729	100.202	-13.971	1.00	64.54	BBBB
ATOM	5109	O	GLY	B	161	-15.650	100.722	-14.231	1.00	64.54	BBBB
ATOM	5110	N	SER	B	162	-17.323	100.333	-12.793	1.00	63.71	BBBB
ATOM	5111	CA	SER	B	162	-16.744	101.132	-11.716	1.00	62.50	BBBB
ATOM	5112	CB	SER	B	162	-17.835	101.520	-10.738	1.00	62.33	BBBB
ATOM	5113	OG	SER	B	162	-18.518	100.353	-10.328	1.00	64.23	BBBB
ATOM	5114	C	SER	B	162	-15.667	100.382	-10.961	1.00	60.98	BBBB
ATOM	5115	O	SER	B	162	-14.984	100.947	-10.110	1.00	60.85	BBBB
ATOM	5116	N	CYS	B	163	-15.521	99.106	-11.288	1.00	59.83	BBBB
ATOM	5117	CA	CYS	B	163	-14.554	98.241	-10.632	1.00	58.66	BBBB
ATOM	5118	C	CYS	B	163	-13.292	97.999	-11.444	1.00	59.15	BBBB
ATOM	5119	O	CYS	B	163	-13.364	97.543	-12.580	1.00	59.93	BBBB
ATOM	5120	CB	CYS	B	163	-15.216	96.902	-10.326	1.00	57.17	BBBB
ATOM	5121	SG	CYS	B	163	-16.677	97.045	-9.251	1.00	55.89	BBBB
ATOM	5122	N	GLN	B	164	-12.139	98.295	-10.851	1.00	59.35	BBBB
ATOM	5123	CA	GLN	B	164	-10.848	98.087	-11.503	1.00	59.71	BBBB
ATOM	5124	CB	GLN	B	164	-9.736	98.744	-10.682	1.00	58.27	BBBB
ATOM	5125	CG	GLN	B	164	-9.729	100.262	-10.714	1.00	57.01	BBBB
ATOM	5126	CD	GLN	B	164	-8.988	100.876	-9.530	1.00	57.67	BBBB
ATOM	5127	OE1	GLN	B	164	-9.573	101.088	-8.465	1.00	56.73	BBBB
ATOM	5128	NE2	GLN	B	164	-7.694	101.153	-9.707	1.00	56.75	BBBB
ATOM	5129	C	GLN	B	164	-10.529	96.593	-11.664	1.00	61.24	BBBB
ATOM	5130	O	GLN	B	164	-11.181	95.734	-11.064	1.00	60.96	BBBB
ATOM	5131	N	LYS	B	165	-9.532	96.290	-12.493	1.00	63.38	BBBB
ATOM	5132	CA	LYS	B	165	-9.106	94.910	-12.709	1.00	64.89	BBBB
ATOM	5133	CB	LYS	B	165	-8.288	94.776	-13.997	1.00	65.32	BBBB
ATOM	5134	CG	LYS	B	165	-9.071	94.873	-15.298	1.00	66.27	BBBB
ATOM	5135	CD	LYS	B	165	-8.150	94.584	-16.481	1.00	65.77	BBBB
ATOM	5136	CE	LYS	B	165	-8.851	94.777	-17.806	1.00	65.83	BBBB
ATOM	5137	NZ	LYS	B	165	-10.105	93.986	-17.858	1.00	65.95	BBBB
ATOM	5138	C	LYS	B	165	-8.226	94.506	-11.530	1.00	65.87	BBBB
ATOM	5139	O	LYS	B	165	-7.447	95.318	-11.025	1.00	65.70	BBBB
ATOM	5140	N	CYS	B	166	-8.344	93.255	-11.101	1.00	66.39	BBBB
ATOM	5141	CA	CYS	B	166	-7.551	92.772	-9.983	1.00	67.92	BBBB
ATOM	5142	C	CYS	B	166	-6.088	93.181	-10.082	1.00	69.45	BBBB
ATOM	5143	O	CYS	B	166	-5.673	94.216	-9.555	1.00	71.07	BBBB
ATOM	5144	CB	CYS	B	166	-7.669	91.253	-9.881	1.00	66.22	BBBB
ATOM	5145	SG	CYS	B	166	-9.002	90.761	-8.753	1.00	66.31	BBBB
ATOM	5146	N	ASP	B	167	-5.311	92.352	-10.757	1.00	69.98	BBBB
ATOM	5147	CA	ASP	B	167	-3.896	92.598	-10.956	1.00	70.69	BBBB
ATOM	5148	CB	ASP	B	167	-3.176	92.829	-9.628	1.00	68.80	BBBB
ATOM	5149	CG	ASP	B	167	-1.682	93.042	-9.806	1.00	68.71	BBBB
ATOM	5150	OD1	ASP	B	167	-1.239	94.198	-10.019	1.00	65.57	BBBB
ATOM	5151	OD2	ASP	B	167	-0.949	92.035	-9.751	1.00	69.41	BBBB
ATOM	5152	C	ASP	B	167	-3.362	91.347	-11.621	1.00	72.58	BBBB
ATOM	5153	O	ASP	B	167	-3.899	90.250	-11.431	1.00	72.47	BBBB
ATOM	5154	N	PRO	B	168	-2.309	91.493	-12.430	1.00	73.71	BBBB
ATOM	5155	CD	PRO	B	168	-1.620	92.737	-12.817	1.00	73.48	BBBB
ATOM	5156	CA	PRO	B	168	-1.732	90.337	-13.114	1.00	74.58	BBBB
ATOM	5157	CB	PRO	B	168	-0.534	90.944	-13.841	1.00	75.54	BBBB
ATOM	5158	CG	PRO	B	168	-0.992	92.357	-14.118	1.00	74.60	BBBB
ATOM	5159	C	PRO	B	168	-1.323	89.209	-12.155	1.00	74.88	BBBB
ATOM	5160	O	PRO	B	168	-1.697	88.047	-12.346	1.00	74.50	BBBB
ATOM	5161	N	SER	B	169	-0.575	89.569	-11.115	1.00	73.58	BBBB
ATOM	5162	CA	SER	B	169	-0.081	88.599	-10.149	1.00	73.22	BBBB
ATOM	5163	CB	SER	B	169	1.108	89.195	-9.391	1.00	73.74	BBBB
ATOM	5164	OG	SER	B	169	0.738	90.378	-8.707	1.00	73.29	BBBB
ATOM	5165	C	SER	B	169	-1.085	88.045	-9.142	1.00	72.62	BBBB
ATOM	5166	O	SER	B	169	-0.693	87.640	-8.046	1.00	74.56	BBBB
ATOM	5167	N	CYS	B	170	-2.365	88.007	-9.496	1.00	70.56	BBBB
ATOM	5168	CA	CYS	B	170	-3.361	87.484	-8.566	1.00	70.18	BBBB
ATOM	5169	C	CYS	B	170	-3.776	86.061	-8.896	1.00	71.85	BBBB
ATOM	5170	O	CYS	B	170	-4.064	85.732	-10.041	1.00	71.70	BBBB

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ATOM	5171	CB	CYS B 170	-4.620	88.348	-8.546	1.00	66.51	BBBB
ATOM	5172	SG	CYS B 170	-4.616	89.887	-7.567	1.00	63.03	BBBB
ATOM	5173	N	PRO B 171	-3.817	85.194	-7.881	1.00	73.64	BBBB
ATOM	5174	CD	PRO B 171	-3.238	85.374	-6.538	1.00	74.04	BBBB
ATOM	5175	CA	PRO B 171	-4.211	83.801	-8.096	1.00	74.95	BBBB
ATOM	5176	CB	PRO B 171	-4.039	83.181	-6.712	1.00	75.59	BBBB
ATOM	5177	CG	PRO B 171	-2.872	83.956	-6.164	1.00	75.44	BBBB
ATOM	5178	C	PRO B 171	-5.637	83.684	-8.615	1.00	75.10	BBBB
ATOM	5179	O	PRO B 171	-6.597	83.857	-7.863	1.00	74.06	BBBB
ATOM	5180	N	ASN B 172	-5.758	83.386	-9.905	1.00	76.34	BBBB
ATOM	5181	CA	ASN B 172	-7.055	83.233	-10.558	1.00	78.94	BBBB
ATOM	5182	CB	ASN B 172	-7.868	82.132	-9.880	1.00	83.79	BBBB
ATOM	5183	CG	ASN B 172	-7.029	80.932	-9.527	1.00	89.66	BBBB
ATOM	5184	OD1	ASN B 172	-6.202	80.993	-8.616	1.00	91.12	BBBB
ATOM	5185	ND2	ASN B 172	-7.221	79.836	-10.253	1.00	94.21	BBBB
ATOM	5186	C	ASN B 172	-7.850	84.530	-10.525	1.00	77.82	BBBB
ATOM	5187	O	ASN B 172	-9.057	84.525	-10.272	1.00	77.75	BBBB
ATOM	5188	N	GLY B 173	-7.167	85.641	-10.785	1.00	76.34	BBBB
ATOM	5189	CA	GLY B 173	-7.834	86.928	-10.774	1.00	73.69	BBBB
ATOM	5190	C	GLY B 173	-8.642	87.116	-9.506	1.00	71.86	BBBB
ATOM	5191	O	GLY B 173	-9.793	87.546	-9.554	1.00	71.57	BBBB
ATOM	5192	N	SER B 174	-8.037	86.776	-8.370	1.00	69.87	BBBB
ATOM	5193	CA	SER B 174	-8.686	86.919	-7.071	1.00	66.85	BBBB
ATOM	5194	CB	SER B 174	-8.626	85.604	-6.300	1.00	66.91	BBBB
ATOM	5195	OG	SER B 174	-9.423	84.621	-6.927	1.00	67.71	BBBB
ATOM	5196	C	SER B 174	-8.002	88.021	-6.270	1.00	64.54	BBBB
ATOM	5197	O	SER B 174	-6.805	87.959	-5.995	1.00	64.78	BBBB
ATOM	5198	N	CYS B 175	-8.767	89.038	-5.901	1.00	61.79	BBBB
ATOM	5199	CA	CYS B 175	-8.214	90.148	-5.147	1.00	59.20	BBBB
ATOM	5200	C	CYS B 175	-9.345	90.850	-4.409	1.00	57.30	BBBB
ATOM	5201	O	CYS B 175	-10.495	90.792	-4.840	1.00	57.20	BBBB
ATOM	5202	CB	CYS B 175	-7.526	91.121	-6.103	1.00	61.28	BBBB
ATOM	5203	SG	CYS B 175	-8.681	92.016	-7.188	1.00	61.48	BBBB
ATOM	5204	N	TRP B 176	-9.028	91.505	-3.298	1.00	54.56	BBBB
ATOM	5205	CA	TRP B 176	-10.052	92.208	-2.539	1.00	52.53	BBBB
ATOM	5206	CB	TRP B 176	-9.745	92.174	-1.044	1.00	50.20	BBBB
ATOM	5207	CG	TRP B 176	-9.858	90.826	-0.455	1.00	46.74	BBBB
ATOM	5208	CD2	TRP B 176	-11.046	90.218	0.054	1.00	44.30	BBBB
ATOM	5209	CE2	TRP B 176	-10.697	88.924	0.492	1.00	45.71	BBBB
ATOM	5210	CE3	TRP B 176	-12.372	90.638	0.183	1.00	41.91	BBBB
ATOM	5211	CD1	TRP B 176	-8.860	89.906	-0.311	1.00	45.66	BBBB
ATOM	5212	NE1	TRP B 176	-9.355	88.760	0.257	1.00	45.18	BBBB
ATOM	5213	CZ2	TRP B 176	-11.634	88.044	1.055	1.00	45.11	BBBB
ATOM	5214	CZ3	TRP B 176	-13.303	89.765	0.740	1.00	41.79	BBBB
ATOM	5215	CH2	TRP B 176	-12.928	88.484	1.169	1.00	42.58	BBBB
ATOM	5216	C	TRP B 176	-10.134	93.648	-2.993	1.00	53.37	BBBB
ATOM	5217	O	TRP B 176	-11.089	94.361	-2.672	1.00	52.95	BBBB
ATOM	5218	N	GLY B 177	-9.121	94.073	-3.738	1.00	53.13	BBBB
ATOM	5219	CA	GLY B 177	-9.095	95.431	-4.227	1.00	54.80	BBBB
ATOM	5220	C	GLY B 177	-8.099	95.581	-5.352	1.00	55.77	BBBB
ATOM	5221	O	GLY B 177	-7.665	94.591	-5.943	1.00	58.20	BBBB
ATOM	5222	N	ALA B 178	-7.727	96.819	-5.646	1.00	54.65	BBBB
ATOM	5223	CA	ALA B 178	-6.782	97.078	-6.710	1.00	55.63	BBBB
ATOM	5224	CB	ALA B 178	-6.981	98.490	-7.245	1.00	53.85	BBBB
ATOM	5225	C	ALA B 178	-5.372	96.909	-6.172	1.00	56.82	BBBB
ATOM	5226	O	ALA B 178	-5.142	97.061	-4.975	1.00	57.25	BBBB
ATOM	5227	N	GLY B 179	-4.434	96.586	-7.057	1.00	57.80	BBBB
ATOM	5228	CA	GLY B 179	-3.052	96.423	-6.644	1.00	59.34	BBBB
ATOM	5229	C	GLY B 179	-2.702	95.021	-6.190	1.00	61.36	BBBB
ATOM	5230	O	GLY B 179	-3.587	94.227	-5.875	1.00	60.44	BBBB
ATOM	5231	N	GLU B 180	-1.402	94.725	-6.166	1.00	63.78	BBBB
ATOM	5232	CA	GLU B 180	-0.885	93.421	-5.748	1.00	65.34	BBBB
ATOM	5233	CB	GLU B 180	0.643	93.381	-5.903	1.00	67.80	BBBB
ATOM	5234	CG	GLU B 180	1.154	93.162	-7.326	1.00	72.35	BBBB
ATOM	5235	CD	GLU B 180	2.670	92.911	-7.387	1.00	75.42	BBBB
ATOM	5236	OE1	GLU B 180	3.147	91.983	-6.688	1.00	75.53	BBBB
ATOM	5237	OE2	GLU B 180	3.379	93.635	-8.136	1.00	75.00	BBBB
ATOM	5238	C	GLU B 180	-1.242	93.100	-4.294	1.00	64.75	BBBB
ATOM	5239	O	GLU B 180	-1.814	92.041	-3.991	1.00	63.06	BBBB
ATOM	5240	N	GLU B 181	-0.896	94.030	-3.407	1.00	63.84	BBBB
ATOM	5241	CA	GLU B 181	-1.138	93.893	-1.976	1.00	63.45	BBBB
ATOM	5242	CB	GLU B 181	-0.890	95.219	-1.283	1.00	64.77	BBBB
ATOM	5243	CG	GLU B 181	-1.660	96.362	-1.883	1.00	70.67	BBBB
ATOM	5244	CD	GLU B 181	-1.490	97.626	-1.076	1.00	74.52	BBBB
ATOM	5245	OE1	GLU B 181	-0.323	97.999	-0.815	1.00	77.04	BBBB

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ATOM	5246	OE2	GLU	B	181	-2.513	98.241	-0.698	1.00	76.54	BBBB
ATOM	5247	C	GLU	B	181	-2.518	93.399	-1.588	1.00	62.28	BBBB
ATOM	5248	O	GLU	B	181	-2.752	93.085	-0.417	1.00	62.84	BBBB
ATOM	5249	N	ASN	B	182	-3.428	93.332	-2.557	1.00	59.34	BBBB
ATOM	5250	CA	ASN	B	182	-4.781	92.877	-2.287	1.00	55.78	BBBB
ATOM	5251	CB	ASN	B	182	-5.795	93.970	-2.613	1.00	55.89	BBBB
ATOM	5252	CG	ASN	B	182	-5.778	95.087	-1.600	1.00	56.72	BBBB
ATOM	5253	OD1	ASN	B	182	-5.991	94.858	-0.408	1.00	55.22	BBBB
ATOM	5254	ND2	ASN	B	182	-5.522	96.307	-2.063	1.00	57.94	BBBB
ATOM	5255	C	ASN	B	182	-5.157	91.609	-3.015	1.00	54.35	BBBB
ATOM	5256	O	ASN	B	182	-6.340	91.272	-3.099	1.00	52.49	BBBB
ATOM	5257	N	CYS	B	183	-4.163	90.912	-3.557	1.00	53.60	BBBB
ATOM	5258	CA	CYS	B	183	-4.434	89.649	-4.237	1.00	54.26	BBBB
ATOM	5259	C	CYS	B	183	-4.840	88.639	-3.148	1.00	53.75	BBBB
ATOM	5260	O	CYS	B	183	-4.294	88.665	-2.034	1.00	52.95	BBBB
ATOM	5261	CB	CYS	B	183	-3.184	89.161	-4.990	1.00	57.43	BBBB
ATOM	5262	SG	CYS	B	183	-2.837	90.009	-6.575	1.00	60.09	BBBB
ATOM	5263	N	GLN	B	184	-5.800	87.767	-3.448	1.00	50.72	BBBB
ATOM	5264	CA	GLN	B	184	-6.246	86.793	-2.457	1.00	49.47	BBBB
ATOM	5265	CB	GLN	B	184	-7.450	86.018	-2.971	1.00	45.31	BBBB
ATOM	5266	CG	GLN	B	184	-7.836	84.886	-2.061	1.00	44.19	BBBB
ATOM	5267	CD	GLN	B	184	-9.193	84.300	-2.382	1.00	46.25	BBBB
ATOM	5268	OE1	GLN	B	184	-9.613	84.264	-3.541	1.00	46.43	BBBB
ATOM	5269	NE2	GLN	B	184	-9.881	83.813	-1.354	1.00	44.95	BBBB
ATOM	5270	C	GLN	B	184	-5.167	85.803	-2.032	1.00	51.51	BBBB
ATOM	5271	O	GLN	B	184	-4.980	84.777	-2.670	1.00	52.63	BBBB
ATOM	5272	N	LYS	B	185	-4.465	86.115	-0.945	1.00	53.76	BBBB
ATOM	5273	CA	LYS	B	185	-3.405	85.258	-0.414	1.00	54.66	BBBB
ATOM	5274	CB	LYS	B	185	-2.796	85.922	0.821	1.00	54.75	BBBB
ATOM	5275	CG	LYS	B	185	-2.802	87.439	0.713	1.00	56.71	BBBB
ATOM	5276	CD	LYS	B	185	-2.363	88.156	1.987	1.00	56.19	BBBB
ATOM	5277	CE	LYS	B	185	-0.860	88.112	2.161	1.00	56.09	BBBB
ATOM	5278	NZ	LYS	B	185	-0.424	89.016	3.254	1.00	55.49	BBBB
ATOM	5279	C	LYS	B	185	-3.995	83.898	-0.038	1.00	54.93	BBBB
ATOM	5280	O	LYS	B	185	-4.836	83.813	0.851	1.00	55.22	BBBB
ATOM	5281	N	LEU	B	186	-3.553	82.839	-0.716	1.00	55.71	BBBB
ATOM	5282	CA	LEU	B	186	-4.061	81.489	-0.455	1.00	56.25	BBBB
ATOM	5283	CB	LEU	B	186	-4.201	80.729	-1.774	1.00	56.20	BBBB
ATOM	5284	CG	LEU	B	186	-5.167	81.340	-2.797	1.00	56.90	BBBB
ATOM	5285	CD1	LEU	B	186	-5.042	80.603	-4.123	1.00	56.67	BBBB
ATOM	5286	CD2	LEU	B	186	-6.599	81.272	-2.269	1.00	54.83	BBBB
ATOM	5287	C	LEU	B	186	-3.194	80.677	0.515	1.00	56.05	BBBB
ATOM	5288	O	LEU	B	186	-1.961	80.762	0.482	1.00	55.90	BBBB
ATOM	5289	N	THR	B	187	-3.845	79.893	1.375	1.00	55.09	BBBB
ATOM	5290	CA	THR	B	187	-3.132	79.068	2.356	1.00	53.96	BBBB
ATOM	5291	CB	THR	B	187	-2.950	79.799	3.710	1.00	52.11	BBBB
ATOM	5292	OG1	THR	B	187	-4.237	80.065	4.287	1.00	48.60	BBBB
ATOM	5293	CG2	THR	B	187	-2.179	81.095	3.533	1.00	49.17	BBBB
ATOM	5294	C	THR	B	187	-3.812	77.730	2.665	1.00	54.65	BBBB
ATOM	5295	O	THR	B	187	-3.455	77.078	3.638	1.00	54.99	BBBB
ATOM	5296	N	LYS	B	188	-4.789	77.323	1.859	1.00	55.34	BBBB
ATOM	5297	CA	LYS	B	188	-5.475	76.049	2.085	1.00	57.04	BBBB
ATOM	5298	CB	LYS	B	188	-6.857	76.288	2.689	1.00	54.07	BBBB
ATOM	5299	CG	LYS	B	188	-7.608	75.011	2.984	1.00	53.80	BBBB
ATOM	5300	CD	LYS	B	188	-8.883	75.265	3.757	1.00	53.87	BBBB
ATOM	5301	CE	LYS	B	188	-9.352	73.992	4.452	1.00	55.59	BBBB
ATOM	5302	NZ	LYS	B	188	-10.452	74.213	5.446	1.00	54.67	BBBB
ATOM	5303	C	LYS	B	188	-5.620	75.200	0.812	1.00	60.26	BBBB
ATOM	5304	O	LYS	B	188	-5.084	74.091	0.725	1.00	61.19	BBBB
ATOM	5305	N	ILE	B	189	-6.342	75.726	-0.171	1.00	62.83	BBBB
ATOM	5306	CA	ILE	B	189	-6.569	75.021	-1.427	1.00	65.12	BBBB
ATOM	5307	CB	ILE	B	189	-7.563	75.808	-2.327	1.00	66.07	BBBB
ATOM	5308	CG2	ILE	B	189	-7.802	75.051	-3.629	1.00	68.81	BBBB
ATOM	5309	CG1	ILE	B	189	-8.903	75.989	-1.610	1.00	66.47	BBBB
ATOM	5310	CD1	ILE	B	189	-9.716	74.708	-1.460	1.00	65.18	BBBB
ATOM	5311	C	ILE	B	189	-5.290	74.734	-2.235	1.00	65.74	BBBB
ATOM	5312	O	ILE	B	189	-5.278	73.838	-3.079	1.00	65.50	BBBB
ATOM	5313	N	ILE	B	190	-4.218	75.481	-1.986	1.00	65.91	BBBB
ATOM	5314	CA	ILE	B	190	-2.973	75.268	-2.726	1.00	66.64	BBBB
ATOM	5315	CB	ILE	B	190	-2.254	76.595	-3.042	1.00	65.23	BBBB
ATOM	5316	CG2	ILE	B	190	-3.182	77.524	-3.794	1.00	64.37	BBBB
ATOM	5317	CG1	ILE	B	190	-1.754	77.235	-1.740	1.00	63.16	BBBB
ATOM	5318	CD1	ILE	B	190	-0.634	78.225	-1.939	1.00	60.29	BBBB
ATOM	5319	C	ILE	B	190	-1.979	74.415	-1.947	1.00	68.80	BBBB
ATOM	5320	O	ILE	B	190	-0.784	74.403	-2.260	1.00	70.62	BBBB

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ATOM	5321	N	CYS	B	191	-2.464	73.696	-0.943	1.00	69.76	BBBB
ATOM	5322	CA	CYS	B	191	-1.581	72.892	-0.112	1.00	69.84	BBBB
ATOM	5323	C	CYS	B	191	-1.097	71.575	-0.699	1.00	71.86	BBBB
ATOM	5324	O	CYS	B	191	-1.800	70.928	-1.475	1.00	72.19	BBBB
ATOM	5325	CB	CYS	B	191	-2.246	72.662	1.239	1.00	66.69	BBBB
ATOM	5326	SG	CYS	B	191	-2.546	74.245	2.079	1.00	60.81	BBBB
ATOM	5327	N	ALA	B	192	0.119	71.193	-0.315	1.00	73.83	BBBB
ATOM	5328	CA	ALA	B	192	0.739	69.960	-0.789	1.00	77.08	BBBB
ATOM	5329	CB	ALA	B	192	2.228	69.978	-0.458	1.00	76.70	BBBB
ATOM	5330	C	ALA	B	192	0.087	68.694	-0.225	1.00	78.75	BBBB
ATOM	5331	O	ALA	B	192	0.601	68.090	0.714	1.00	79.97	BBBB
ATOM	5332	N	GLN	B	193	-1.044	68.312	-0.815	1.00	80.29	BBBB
ATOM	5333	CA	GLN	B	193	-1.825	67.126	-0.448	1.00	81.69	BBBB
ATOM	5334	CB	GLN	B	193	-1.667	66.065	-1.542	1.00	83.02	BBBB
ATOM	5335	CG	GLN	B	193	-2.320	64.729	-1.220	1.00	85.81	BBBB
ATOM	5336	CD	GLN	B	193	-2.222	63.737	-2.368	1.00	87.31	BBBB
ATOM	5337	OE1	GLN	B	193	-2.477	62.544	-2.195	1.00	87.40	BBBB
ATOM	5338	NE2	GLN	B	193	-1.859	64.228	-3.551	1.00	88.28	BBBB
ATOM	5339	C	GLN	B	193	-1.621	66.461	0.922	1.00	81.96	BBBB
ATOM	5340	O	GLN	B	193	-2.560	66.365	1.715	1.00	82.69	BBBB
ATOM	5341	N	GLN	B	194	-0.410	65.987	1.192	1.00	81.39	BBBB
ATOM	5342	CA	GLN	B	194	-0.120	65.310	2.452	1.00	81.20	BBBB
ATOM	5343	CB	GLN	B	194	1.286	64.702	2.404	1.00	83.56	BBBB
ATOM	5344	CG	GLN	B	194	2.359	65.626	1.854	1.00	86.44	BBBB
ATOM	5345	CD	GLN	B	194	3.673	65.487	2.597	1.00	88.04	BBBB
ATOM	5346	OE1	GLN	B	194	4.159	64.377	2.819	1.00	89.12	BBBB
ATOM	5347	NE2	GLN	B	194	4.259	66.617	2.986	1.00	88.90	BBBB
ATOM	5348	C	GLN	B	194	-0.274	66.127	3.737	1.00	79.78	BBBB
ATOM	5349	O	GLN	B	194	-0.063	65.602	4.834	1.00	81.00	BBBB
ATOM	5350	N	CYS	B	195	-0.638	67.399	3.617	1.00	77.49	BBBB
ATOM	5351	CA	CYS	B	195	-0.812	68.248	4.795	1.00	74.25	BBBB
ATOM	5352	C	CYS	B	195	-2.241	68.093	5.317	1.00	73.43	BBBB
ATOM	5353	O	CYS	B	195	-3.129	67.689	4.570	1.00	73.47	BBBB
ATOM	5354	CB	CYS	B	195	-0.540	69.702	4.427	1.00	72.64	BBBB
ATOM	5355	SG	CYS	B	195	1.047	69.999	3.580	1.00	68.87	BBBB
ATOM	5356	N	SER	B	196	-2.469	68.413	6.590	1.00	72.91	BBBB
ATOM	5357	CA	SER	B	196	-3.808	68.270	7.178	1.00	71.99	BBBB
ATOM	5358	CB	SER	B	196	-3.723	67.592	8.550	1.00	71.63	BBBB
ATOM	5359	OG	SER	B	196	-3.256	68.494	9.539	1.00	72.43	BBBB
ATOM	5360	C	SER	B	196	-4.594	69.577	7.330	1.00	70.72	BBBB
ATOM	5361	O	SER	B	196	-5.800	69.556	7.593	1.00	69.78	BBBB
ATOM	5362	N	GLY	B	197	-3.915	70.708	7.176	1.00	68.99	BBBB
ATOM	5363	CA	GLY	B	197	-4.587	71.986	7.304	1.00	68.35	BBBB
ATOM	5364	C	GLY	B	197	-3.849	73.066	6.547	1.00	68.01	BBBB
ATOM	5365	O	GLY	B	197	-2.982	72.768	5.728	1.00	68.47	BBBB
ATOM	5366	N	ARG	B	198	-4.186	74.320	6.824	1.00	67.24	BBBB
ATOM	5367	CA	ARG	B	198	-3.553	75.454	6.161	1.00	65.80	BBBB
ATOM	5368	CB	ARG	B	198	-3.750	76.722	6.993	1.00	65.04	BBBB
ATOM	5369	CG	ARG	B	198	-5.187	77.216	7.087	1.00	64.08	BBBB
ATOM	5370	CD	ARG	B	198	-5.631	77.874	5.791	1.00	64.70	BBBB
ATOM	5371	NE	ARG	B	198	-6.937	78.515	5.900	1.00	61.44	BBBB
ATOM	5372	CZ	ARG	B	198	-8.055	77.877	6.220	1.00	60.87	BBBB
ATOM	5373	NH1	ARG	B	198	-8.030	76.576	6.468	1.00	62.42	BBBB
ATOM	5374	NH2	ARG	B	198	-9.200	78.538	6.293	1.00	60.41	BBBB
ATOM	5375	C	ARG	B	198	-2.062	75.226	5.939	1.00	66.11	BBBB
ATOM	5376	O	ARG	B	198	-1.419	74.489	6.675	1.00	65.99	BBBB
ATOM	5377	N	CYS	B	199	-1.523	75.857	4.904	1.00	66.59	BBBB
ATOM	5378	CA	CYS	B	199	-0.108	75.755	4.585	1.00	65.79	BBBB
ATOM	5379	C	CYS	B	199	0.382	77.154	4.251	1.00	67.37	BBBB
ATOM	5380	O	CYS	B	199	-0.388	78.112	4.309	1.00	67.24	BBBB
ATOM	5381	CB	CYS	B	199	0.116	74.816	3.395	1.00	64.09	BBBB
ATOM	5382	SG	CYS	B	199	-0.794	75.247	1.883	1.00	56.95	BBBB
ATOM	5383	N	ARG	B	200	1.658	77.275	3.906	1.00	68.25	BBBB
ATOM	5384	CA	ARG	B	200	2.231	78.570	3.580	1.00	70.62	BBBB
ATOM	5385	CB	ARG	B	200	3.324	78.924	4.586	1.00	71.23	BBBB
ATOM	5386	CG	ARG	B	200	4.445	77.909	4.622	1.00	74.92	BBBB
ATOM	5387	CD	ARG	B	200	5.479	78.220	5.677	1.00	78.40	BBBB
ATOM	5388	NE	ARG	B	200	6.080	79.533	5.488	1.00	81.26	BBBB
ATOM	5389	CZ	ARG	B	200	7.121	79.977	6.183	1.00	82.96	BBBB
ATOM	5390	NH1	ARG	B	200	7.674	79.202	7.110	1.00	83.76	BBBB
ATOM	5391	NH2	ARG	B	200	7.603	81.196	5.959	1.00	82.89	BBBB
ATOM	5392	C	ARG	B	200	2.818	78.526	2.181	1.00	72.45	BBBB
ATOM	5393	O	ARG	B	200	3.609	79.390	1.801	1.00	72.80	BBBB
ATOM	5394	N	GLY	B	201	2.428	77.512	1.416	1.00	74.24	BBBB
ATOM	5395	CA	GLY	B	201	2.937	77.381	0.065	1.00	77.11	BBBB

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ATOM	5396	C	GLY	B	201	2.439	76.130	-0.627	1.00	79.54	BBBB
ATOM	5397	O	GLY	B	201	1.587	75.412	-0.096	1.00	79.87	BBBB
ATOM	5398	N	SER	B	202	2.974	75.867	-1.817	1.00	81.31	BBBB
ATOM	5399	CA	SER	B	202	2.583	74.699	-2.597	1.00	82.59	BBBB
ATOM	5400	CB	SER	B	202	2.659	75.023	-4.091	1.00	83.79	BBBB
ATOM	5401	OG	SER	B	202	1.843	76.140	-4.409	1.00	85.38	BBBB
ATOM	5402	C	SER	B	202	3.463	73.490	-2.281	1.00	82.50	BBBB
ATOM	5403	O	SER	B	202	3.059	72.347	-2.497	1.00	82.11	BBBB
ATOM	5404	N	SER	B	203	4.656	73.746	-1.755	1.00	82.48	BBBB
ATOM	5405	CA	SER	B	203	5.593	72.680	-1.410	1.00	83.92	BBBB
ATOM	5406	CB	SER	B	203	6.980	73.280	-1.188	1.00	83.69	BBBB
ATOM	5407	OG	SER	B	203	6.884	74.458	-0.413	1.00	84.12	BBBB
ATOM	5408	C	SER	B	203	5.182	71.865	-0.179	1.00	84.69	BBBB
ATOM	5409	O	SER	B	203	4.386	72.321	0.642	1.00	85.38	BBBB
ATOM	5410	N	PRO	B	204	5.714	70.634	-0.048	1.00	85.35	BBBB
ATOM	5411	CD	PRO	B	204	6.380	69.892	-1.130	1.00	85.59	BBBB
ATOM	5412	CA	PRO	B	204	5.420	69.735	1.078	1.00	85.26	BBBB
ATOM	5413	CB	PRO	B	204	5.892	68.369	0.573	1.00	85.35	BBBB
ATOM	5414	CG	PRO	B	204	5.838	68.504	-0.924	1.00	85.97	BBBB
ATOM	5415	C	PRO	B	204	6.156	70.145	2.352	1.00	84.90	BBBB
ATOM	5416	O	PRO	B	204	5.819	69.699	3.451	1.00	85.25	BBBB
ATOM	5417	N	SER	B	205	7.170	70.989	2.195	1.00	83.82	BBBB
ATOM	5418	CA	SER	B	205	7.954	71.461	3.329	1.00	82.49	BBBB
ATOM	5419	CB	SER	B	205	9.370	71.804	2.877	1.00	81.53	BBBB
ATOM	5420	OG	SER	B	205	9.834	70.867	1.927	1.00	82.91	BBBB
ATOM	5421	C	SER	B	205	7.302	72.721	3.859	1.00	81.72	BBBB
ATOM	5422	O	SER	B	205	7.589	73.179	4.965	1.00	81.71	BBBB
ATOM	5423	N	ASP	B	206	6.405	73.266	3.050	1.00	80.88	BBBB
ATOM	5424	CA	ASP	B	206	5.739	74.510	3.378	1.00	79.42	BBBB
ATOM	5425	CB	ASP	B	206	5.665	75.383	2.120	1.00	80.43	BBBB
ATOM	5426	CG	ASP	B	206	6.998	76.019	1.778	1.00	82.78	BBBB
ATOM	5427	OD1	ASP	B	206	7.996	75.277	1.624	1.00	83.77	BBBB
ATOM	5428	OD2	ASP	B	206	7.052	77.262	1.665	1.00	84.24	BBBB
ATOM	5429	C	ASP	B	206	4.375	74.474	4.039	1.00	77.27	BBBB
ATOM	5430	O	ASP	B	206	3.571	75.371	3.809	1.00	78.30	BBBB
ATOM	5431	N	CYS	B	207	4.065	73.470	4.845	1.00	73.87	BBBB
ATOM	5432	CA	CYS	B	207	2.763	73.567	5.461	1.00	70.85	BBBB
ATOM	5433	C	CYS	B	207	2.740	73.687	6.966	1.00	69.49	BBBB
ATOM	5434	O	CYS	B	207	3.682	73.315	7.665	1.00	69.22	BBBB
ATOM	5435	CB	CYS	B	207	1.802	72.490	4.970	1.00	70.63	BBBB
ATOM	5436	SG	CYS	B	207	2.256	70.748	5.026	1.00	67.08	BBBB
ATOM	5437	N	CYS	B	208	1.637	74.251	7.439	1.00	67.32	BBBB
ATOM	5438	CA	CYS	B	208	1.418	74.548	8.843	1.00	65.11	BBBB
ATOM	5439	C	CYS	B	208	1.077	73.423	9.792	1.00	64.18	BBBB
ATOM	5440	O	CYS	B	208	0.484	72.407	9.412	1.00	62.88	BBBB
ATOM	5441	CB	CYS	B	208	0.326	75.610	8.966	1.00	64.00	BBBB
ATOM	5442	SG	CYS	B	208	0.558	77.027	7.861	1.00	61.78	BBBB
ATOM	5443	N	HIS	B	209	1.444	73.658	11.050	1.00	62.79	BBBB
ATOM	5444	CA	HIS	B	209	1.180	72.734	12.132	1.00	61.21	BBBB
ATOM	5445	CB	HIS	B	209	1.642	73.343	13.455	1.00	62.12	BBBB
ATOM	5446	CG	HIS	B	209	1.420	72.458	14.641	1.00	63.73	BBBB
ATOM	5447	CD2	HIS	B	209	2.298	71.815	15.449	1.00	62.90	BBBB
ATOM	5448	ND1	HIS	B	209	0.163	72.157	15.121	1.00	63.04	BBBB
ATOM	5449	CE1	HIS	B	209	0.277	71.368	16.175	1.00	62.69	BBBB
ATOM	5450	NE2	HIS	B	209	1.561	71.146	16.395	1.00	61.99	BBBB
ATOM	5451	C	HIS	B	209	-0.319	72.511	12.146	1.00	60.28	BBBB
ATOM	5452	O	HIS	B	209	-1.088	73.367	11.714	1.00	61.56	BBBB
ATOM	5453	N	ASN	B	210	-0.731	71.353	12.630	1.00	58.94	BBBB
ATOM	5454	CA	ASN	B	210	-2.138	71.010	12.683	1.00	57.03	BBBB
ATOM	5455	CB	ASN	B	210	-2.299	69.678	13.401	1.00	58.12	BBBB
ATOM	5456	CG	ASN	B	210	-3.741	69.371	13.722	1.00	59.45	BBBB
ATOM	5457	OD1	ASN	B	210	-4.552	69.106	12.828	1.00	59.46	BBBB
ATOM	5458	ND2	ASN	B	210	-4.077	69.420	15.005	1.00	59.85	BBBB
ATOM	5459	C	ASN	B	210	-3.018	72.047	13.374	1.00	55.24	BBBB
ATOM	5460	O	ASN	B	210	-4.188	72.210	13.032	1.00	54.32	BBBB
ATOM	5461	N	GLN	B	211	-2.448	72.747	14.346	1.00	54.05	BBBB
ATOM	5462	CA	GLN	B	211	-3.194	73.723	15.132	1.00	52.44	BBBB
ATOM	5463	CB	GLN	B	211	-2.621	73.761	16.552	1.00	50.22	BBBB
ATOM	5464	CG	GLN	B	211	-2.835	72.495	17.332	1.00	47.43	BBBB
ATOM	5465	CD	GLN	B	211	-4.271	72.313	17.735	1.00	47.94	BBBB
ATOM	5466	OE1	GLN	B	211	-4.883	73.220	18.291	1.00	48.60	BBBB
ATOM	5467	NE2	GLN	B	211	-4.822	71.134	17.470	1.00	47.71	BBBB
ATOM	5468	C	GLN	B	211	-3.262	75.142	14.574	1.00	52.08	BBBB
ATOM	5469	O	GLN	B	211	-4.048	75.961	15.049	1.00	52.42	BBBB
ATOM	5470	N	CYS	B	212	-2.442	75.440	13.578	1.00	51.21	BBBB

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ATOM	5471	CA	CYS	B	212	-2.453	76.763	12.994	1.00	50.26	BBBB
ATOM	5472	C	CYS	B	212	-3.769	77.115	12.327	1.00	51.10	BBBB
ATOM	5473	O	CYS	B	212	-4.307	76.339	11.530	1.00	50.41	BBBB
ATOM	5474	CB	CYS	B	212	-1.330	76.893	11.987	1.00	50.49	BBBB
ATOM	5475	SG	CYS	B	212	0.301	76.968	12.776	1.00	50.39	BBBB
ATOM	5476	N	ALA	B	213	-4.286	78.290	12.680	1.00	51.96	BBBB
ATOM	5477	CA	ALA	B	213	-5.528	78.806	12.106	1.00	52.01	BBBB
ATOM	5478	CB	ALA	B	213	-6.420	79.381	13.187	1.00	52.25	BBBB
ATOM	5479	C	ALA	B	213	-5.124	79.902	11.135	1.00	51.79	BBBB
ATOM	5480	O	ALA	B	213	-4.136	80.606	11.362	1.00	49.63	BBBB
ATOM	5481	N	ALA	B	214	-5.875	80.028	10.049	1.00	52.64	BBBB
ATOM	5482	CA	ALA	B	214	-5.595	81.045	9.044	1.00	54.79	BBBB
ATOM	5483	CB	ALA	B	214	-5.480	82.410	9.700	1.00	54.65	BBBB
ATOM	5484	C	ALA	B	214	-4.333	80.750	8.243	1.00	55.60	BBBB
ATOM	5485	O	ALA	B	214	-4.406	80.575	7.025	1.00	56.74	BBBB
ATOM	5486	N	GLY	B	215	-3.184	80.703	8.918	1.00	55.49	BBBB
ATOM	5487	CA	GLY	B	215	-1.925	80.429	8.234	1.00	54.91	BBBB
ATOM	5488	C	GLY	B	215	-0.710	80.383	9.147	1.00	55.19	BBBB
ATOM	5489	O	GLY	B	215	-0.852	80.364	10.369	1.00	54.27	BBBB
ATOM	5490	N	CYS	B	216	0.489	80.378	8.565	1.00	57.02	BBBB
ATOM	5491	CA	CYS	B	216	1.708	80.319	9.369	1.00	60.29	BBBB
ATOM	5492	C	CYS	B	216	2.982	80.867	8.723	1.00	62.59	BBBB
ATOM	5493	O	CYS	B	216	3.027	81.130	7.525	1.00	64.03	BBBB
ATOM	5494	CB	CYS	B	216	1.964	78.878	9.801	1.00	59.59	BBBB
ATOM	5495	SG	CYS	B	216	2.366	77.756	8.430	1.00	57.68	BBBB
ATOM	5496	N	THR	B	217	4.021	81.016	9.543	1.00	64.51	BBBB
ATOM	5497	CA	THR	B	217	5.318	81.523	9.101	1.00	66.94	BBBB
ATOM	5498	CB	THR	B	217	5.689	82.815	9.830	1.00	67.00	BBBB
ATOM	5499	OG1	THR	B	217	5.861	82.540	11.228	1.00	66.58	BBBB
ATOM	5500	CG2	THR	B	217	4.604	83.852	9.651	1.00	66.04	BBBB
ATOM	5501	C	THR	B	217	6.425	80.511	9.387	1.00	69.34	BBBB
ATOM	5502	O	THR	B	217	7.611	80.835	9.297	1.00	68.96	BBBB
ATOM	5503	N	GLY	B	218	6.025	79.291	9.742	1.00	71.55	BBBB
ATOM	5504	CA	GLY	B	218	6.978	78.237	10.044	1.00	72.15	BBBB
ATOM	5505	C	GLY	B	218	6.296	76.882	10.021	1.00	73.48	BBBB
ATOM	5506	O	GLY	B	218	5.106	76.800	9.707	1.00	74.14	BBBB
ATOM	5507	N	PRO	B	219	7.019	75.792	10.332	1.00	73.86	BBBB
ATOM	5508	CD	PRO	B	219	8.491	75.688	10.344	1.00	73.37	BBBB
ATOM	5509	CA	PRO	B	219	6.412	74.458	10.326	1.00	73.94	BBBB
ATOM	5510	CB	PRO	B	219	7.487	73.616	9.665	1.00	73.10	BBBB
ATOM	5511	CG	PRO	B	219	8.725	74.173	10.308	1.00	73.62	BBBB
ATOM	5512	C	PRO	B	219	6.094	73.976	11.744	1.00	73.98	BBBB
ATOM	5513	O	PRO	B	219	5.295	73.056	11.940	1.00	72.68	BBBB
ATOM	5514	N	ARG	B	220	6.724	74.620	12.723	1.00	74.67	BBBB
ATOM	5515	CA	ARG	B	220	6.551	74.273	14.128	1.00	75.55	BBBB
ATOM	5516	CB	ARG	B	220	7.606	74.998	14.972	1.00	76.68	BBBB
ATOM	5517	CG	ARG	B	220	7.881	74.355	16.325	0.01	78.00	BBBB
ATOM	5518	CD	ARG	B	220	8.471	72.961	16.160	0.01	79.20	BBBB
ATOM	5519	NE	ARG	B	220	8.733	72.314	17.442	0.01	80.22	BBBB
ATOM	5520	CZ	ARG	B	220	7.793	71.988	18.324	0.01	80.77	BBBB
ATOM	5521	NH1	ARG	B	220	6.519	72.246	18.065	0.01	81.11	BBBB
ATOM	5522	NH2	ARG	B	220	8.128	71.402	19.465	0.01	81.10	BBBB
ATOM	5523	C	ARG	B	220	5.153	74.580	14.668	1.00	75.60	BBBB
ATOM	5524	O	ARG	B	220	4.209	74.811	13.914	1.00	76.09	BBBB
ATOM	5525	N	GLU	B	221	5.041	74.586	15.991	1.00	75.46	BBBB
ATOM	5526	CA	GLU	B	221	3.781	74.828	16.685	1.00	73.40	BBBB
ATOM	5527	CB	GLU	B	221	3.647	73.808	17.810	1.00	75.34	BBBB
ATOM	5528	CG	GLU	B	221	2.266	73.655	18.383	1.00	77.59	BBBB
ATOM	5529	CD	GLU	B	221	2.240	72.622	19.488	1.00	79.24	BBBB
ATOM	5530	OE1	GLU	B	221	1.130	72.193	19.880	1.00	79.13	BBBB
ATOM	5531	OE2	GLU	B	221	3.338	72.245	19.965	1.00	79.05	BBBB
ATOM	5532	C	GLU	B	221	3.746	76.238	17.262	1.00	70.98	BBBB
ATOM	5533	O	GLU	B	221	2.773	76.638	17.898	1.00	70.33	BBBB
ATOM	5534	N	SER	B	222	4.822	76.981	17.042	1.00	68.31	BBBB
ATOM	5535	CA	SER	B	222	4.924	78.341	17.533	1.00	66.69	BBBB
ATOM	5536	CB	SER	B	222	6.140	78.475	18.449	1.00	66.78	BBBB
ATOM	5537	OG	SER	B	222	7.343	78.246	17.735	1.00	66.39	BBBB
ATOM	5538	C	SER	B	222	5.057	79.306	16.356	1.00	66.04	BBBB
ATOM	5539	O	SER	B	222	5.494	80.448	16.518	1.00	64.97	BBBB
ATOM	5540	N	ASP	B	223	4.683	78.841	15.167	1.00	65.13	BBBB
ATOM	5541	CA	ASP	B	223	4.765	79.674	13.972	1.00	63.88	BBBB
ATOM	5542	CB	ASP	B	223	5.604	78.978	12.898	1.00	66.53	BBBB
ATOM	5543	CG	ASP	B	223	6.979	78.582	13.394	1.00	69.14	BBBB
ATOM	5544	OD1	ASP	B	223	7.663	79.430	14.010	1.00	68.77	BBBB
ATOM	5545	OD2	ASP	B	223	7.377	77.421	13.158	1.00	71.58	BBBB

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ATOM	5546	C	ASP	B	223	3.394	80.015	13.390	1.00	61.34	BBBB
ATOM	5547	O	ASP	B	223	3.311	80.553	12.294	1.00	60.65	BBBB
ATOM	5548	N	CYS	B	224	2.327	79.697	14.119	1.00	59.27	BBBB
ATOM	5549	CA	CYS	B	224	0.964	79.973	13.661	1.00	57.32	BBBB
ATOM	5550	C	CYS	B	224	0.662	81.468	13.570	1.00	56.08	BBBB
ATOM	5551	O	CYS	B	224	1.207	82.254	14.347	1.00	56.36	BBBB
ATOM	5552	CB	CYS	B	224	-0.056	79.348	14.618	1.00	56.21	BBBB
ATOM	5553	SG	CYS	B	224	-0.095	77.533	14.684	1.00	52.96	BBBB
ATOM	5554	N	LEU	B	225	-0.200	81.860	12.626	1.00	53.46	BBBB
ATOM	5555	CA	LEU	B	225	-0.596	83.270	12.507	1.00	51.28	BBBB
ATOM	5556	CB	LEU	B	225	-1.332	83.539	11.194	1.00	49.12	BBBB
ATOM	5557	CG	LEU	B	225	-0.465	83.623	9.942	1.00	48.71	BBBB
ATOM	5558	CD1	LEU	B	225	-1.334	83.716	8.699	1.00	45.89	BBBB
ATOM	5559	CD2	LEU	B	225	0.456	84.817	10.068	1.00	47.61	BBBB
ATOM	5560	C	LEU	B	225	-1.553	83.499	13.664	1.00	49.96	BBBB
ATOM	5561	O	LEU	B	225	-1.524	84.522	14.340	1.00	49.52	BBBB
ATOM	5562	N	VAL	B	226	-2.391	82.499	13.883	1.00	48.99	BBBB
ATOM	5563	CA	VAL	B	226	-3.371	82.510	14.943	1.00	48.31	BBBB
ATOM	5564	CB	VAL	B	226	-4.625	83.318	14.514	1.00	46.91	BBBB
ATOM	5565	CG1	VAL	B	226	-5.267	82.711	13.291	1.00	47.58	BBBB
ATOM	5566	CG2	VAL	B	226	-5.606	83.368	15.644	1.00	50.56	BBBB
ATOM	5567	C	VAL	B	226	-3.702	81.033	15.237	1.00	49.11	BBBB
ATOM	5568	O	VAL	B	226	-3.491	80.156	14.385	1.00	48.92	BBBB
ATOM	5569	N	CYS	B	227	-4.203	80.766	16.442	1.00	48.11	BBBB
ATOM	5570	CA	CYS	B	227	-4.526	79.411	16.888	1.00	46.37	BBBB
ATOM	5571	C	CYS	B	227	-5.964	78.969	16.613	1.00	46.96	BBBB
ATOM	5572	O	CYS	B	227	-6.878	79.789	16.603	1.00	46.90	BBBB
ATOM	5573	CB	CYS	B	227	-4.270	79.291	18.400	1.00	47.58	BBBB
ATOM	5574	SG	CYS	B	227	-2.575	79.624	19.011	1.00	45.18	BBBB
ATOM	5575	N	ARG	B	228	-6.151	77.665	16.408	1.00	46.74	BBBB
ATOM	5576	CA	ARG	B	228	-7.466	77.074	16.167	1.00	46.89	BBBB
ATOM	5577	CB	ARG	B	228	-7.336	75.711	15.491	1.00	49.25	BBBB
ATOM	5578	CG	ARG	B	228	-7.508	75.679	13.990	1.00	52.88	BBBB
ATOM	5579	CD	ARG	B	228	-7.754	74.237	13.558	1.00	57.98	BBBB
ATOM	5580	NE	ARG	B	228	-8.904	73.686	14.274	1.00	62.81	BBBB
ATOM	5581	CZ	ARG	B	228	-10.173	73.986	14.001	1.00	65.29	BBBB
ATOM	5582	NH1	ARG	B	228	-10.458	74.823	13.009	1.00	65.88	BBBB
ATOM	5583	NH2	ARG	B	228	-11.158	73.489	14.747	1.00	65.20	BBBB
ATOM	5584	C	ARG	B	228	-8.201	76.871	17.489	1.00	47.22	BBBB
ATOM	5585	O	ARG	B	228	-9.403	77.090	17.570	1.00	48.08	BBBB
ATOM	5586	N	LYS	B	229	-7.485	76.418	18.517	1.00	47.70	BBBB
ATOM	5587	CA	LYS	B	229	-8.092	76.204	19.837	1.00	49.08	BBBB
ATOM	5588	CB	LYS	B	229	-8.138	74.717	20.202	1.00	50.16	BBBB
ATOM	5589	CG	LYS	B	229	-8.970	73.840	19.271	1.00	53.15	BBBB
ATOM	5590	CD	LYS	B	229	-9.088	72.424	19.836	1.00	56.15	BBBB
ATOM	5591	CE	LYS	B	229	-9.754	71.454	18.866	1.00	57.64	BBBB
ATOM	5592	NZ	LYS	B	229	-9.711	70.042	19.375	1.00	56.94	BBBB
ATOM	5593	C	LYS	B	229	-7.360	76.967	20.941	1.00	48.38	BBBB
ATOM	5594	O	LYS	B	229	-7.409	78.195	20.979	1.00	49.78	BBBB
ATOM	5595	N	PHE	B	230	-6.669	76.261	21.828	1.00	46.36	BBBB
ATOM	5596	CA	PHE	B	230	-5.983	76.948	22.918	1.00	46.64	BBBB
ATOM	5597	CB	PHE	B	230	-5.639	75.983	24.058	1.00	43.74	BBBB
ATOM	5598	CG	PHE	B	230	-6.834	75.379	24.716	1.00	41.30	BBBB
ATOM	5599	CD1	PHE	B	230	-7.354	74.160	24.267	1.00	40.09	BBBB
ATOM	5600	CD2	PHE	B	230	-7.471	76.039	25.752	1.00	36.60	BBBB
ATOM	5601	CE1	PHE	B	230	-8.498	73.609	24.842	1.00	37.80	BBBB
ATOM	5602	CE2	PHE	B	230	-8.618	75.499	26.334	1.00	39.34	BBBB
ATOM	5603	CZ	PHE	B	230	-9.133	74.275	25.874	1.00	39.20	BBBB
ATOM	5604	C	PHE	B	230	-4.719	77.677	22.536	1.00	47.87	BBBB
ATOM	5605	O	PHE	B	230	-4.120	77.418	21.498	1.00	48.54	BBBB
ATOM	5606	N	ARG	B	231	-4.327	78.600	23.404	1.00	50.85	BBBB
ATOM	5607	CA	ARG	B	231	-3.108	79.362	23.230	1.00	55.68	BBBB
ATOM	5608	CB	ARG	B	231	-3.407	80.850	23.057	1.00	58.01	BBBB
ATOM	5609	CG	ARG	B	231	-2.159	81.695	22.793	1.00	63.59	BBBB
ATOM	5610	CD	ARG	B	231	-2.362	83.150	23.208	1.00	68.98	BBBB
ATOM	5611	NE	ARG	B	231	-3.473	83.783	22.499	1.00	74.41	BBBB
ATOM	5612	CZ	ARG	B	231	-4.017	84.950	22.841	1.00	76.69	BBBB
ATOM	5613	NH1	ARG	B	231	-3.559	85.620	23.892	1.00	77.43	BBBB
ATOM	5614	NH2	ARG	B	231	-5.013	85.455	22.121	1.00	78.28	BBBB
ATOM	5615	C	ARG	B	231	-2.264	79.152	24.492	1.00	57.61	BBBB
ATOM	5616	O	ARG	B	231	-2.659	79.549	25.591	1.00	57.75	BBBB
ATOM	5617	N	ASP	B	232	-1.122	78.491	24.332	1.00	59.15	BBBB
ATOM	5618	CA	ASP	B	232	-0.213	78.244	25.440	1.00	59.97	BBBB
ATOM	5619	CB	ASP	B	232	0.201	76.777	25.484	1.00	61.38	BBBB
ATOM	5620	CG	ASP	B	232	1.000	76.438	26.724	1.00	59.85	BBBB

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ATOM	5621	OD1	ASP	B	232	0.673	76.994	27.788	1.00	58.80	BBBB
ATOM	5622	OD2	ASP	B	232	1.935	75.612	26.635	1.00	60.10	BBBB
ATOM	5623	C	ASP	B	232	1.001	79.121	25.202	1.00	60.54	BBBB
ATOM	5624	O	ASP	B	232	1.983	78.699	24.591	1.00	59.08	BBBB
ATOM	5625	N	GLU	B	233	0.904	80.355	25.685	1.00	62.13	BBBB
ATOM	5626	CA	GLU	B	233	1.953	81.350	25.530	1.00	62.66	BBBB
ATOM	5627	CB	GLU	B	233	3.224	80.930	26.279	1.00	65.57	BBBB
ATOM	5628	CG	GLU	B	233	3.050	80.774	27.798	1.00	69.23	BBBB
ATOM	5629	CD	GLU	B	233	2.230	81.898	28.422	1.00	71.92	BBBB
ATOM	5630	OE1	GLU	B	233	0.991	81.898	28.242	1.00	74.72	BBBB
ATOM	5631	OE2	GLU	B	233	2.818	82.784	29.083	1.00	72.23	BBBB
ATOM	5632	C	GLU	B	233	2.249	81.559	24.051	1.00	61.66	BBBB
ATOM	5633	O	GLU	B	233	1.455	82.169	23.335	1.00	60.89	BBBB
ATOM	5634	N	ALA	B	234	3.377	81.034	23.590	1.00	60.40	BBBB
ATOM	5635	CA	ALA	B	234	3.761	81.198	22.201	1.00	58.53	BBBB
ATOM	5636	CB	ALA	B	234	5.243	81.492	22.114	1.00	56.71	BBBB
ATOM	5637	C	ALA	B	234	3.413	80.016	21.300	1.00	58.73	BBBB
ATOM	5638	O	ALA	B	234	3.890	79.942	20.171	1.00	60.50	BBBB
ATOM	5639	N	THR	B	235	2.585	79.091	21.769	1.00	56.70	BBBB
ATOM	5640	CA	THR	B	235	2.234	77.960	20.916	1.00	55.07	BBBB
ATOM	5641	CB	THR	B	235	2.852	76.638	21.425	1.00	55.35	BBBB
ATOM	5642	OG1	THR	B	235	2.292	76.306	22.702	1.00	56.07	BBBB
ATOM	5643	CG2	THR	B	235	4.358	76.764	21.536	1.00	55.75	BBBB
ATOM	5644	C	THR	B	235	0.735	77.739	20.790	1.00	53.05	BBBB
ATOM	5645	O	THR	B	235	-0.050	78.218	21.604	1.00	53.61	BBBB
ATOM	5646	N	CYS	B	236	0.344	77.003	19.761	1.00	50.02	BBBB
ATOM	5647	CA	CYS	B	236	-1.055	76.694	19.560	1.00	48.29	BBBB
ATOM	5648	C	CYS	B	236	-1.196	75.220	19.902	1.00	46.55	BBBB
ATOM	5649	O	CYS	B	236	-0.535	74.388	19.304	1.00	46.23	BBBB
ATOM	5650	CB	CYS	B	236	-1.442	76.972	18.108	1.00	50.12	BBBB
ATOM	5651	SG	CYS	B	236	-1.415	78.740	17.616	1.00	49.80	BBBB
ATOM	5652	N	LYS	B	237	-2.050	74.899	20.870	1.00	45.86	BBBB
ATOM	5653	CA	LYS	B	237	-2.226	73.516	21.314	1.00	44.21	BBBB
ATOM	5654	CB	LYS	B	237	-1.652	73.358	22.720	1.00	43.64	BBBB
ATOM	5655	CG	LYS	B	237	-0.185	73.730	22.863	1.00	44.01	BBBB
ATOM	5656	CD	LYS	B	237	0.266	73.463	24.283	1.00	45.77	BBBB
ATOM	5657	CE	LYS	B	237	1.682	72.923	24.345	1.00	47.29	BBBB
ATOM	5658	NZ	LYS	B	237	2.709	73.964	24.085	1.00	49.55	BBBB
ATOM	5659	C	LYS	B	237	-3.659	72.997	21.325	1.00	44.70	BBBB
ATOM	5660	O	LYS	B	237	-4.604	73.752	21.554	1.00	46.16	BBBB
ATOM	5661	N	ASP	B	238	-3.808	71.693	21.099	1.00	44.77	BBBB
ATOM	5662	CA	ASP	B	238	-5.115	71.047	21.095	1.00	43.86	BBBB
ATOM	5663	CB	ASP	B	238	-4.994	69.602	20.610	1.00	47.46	BBBB
ATOM	5664	CG	ASP	B	238	-6.345	68.899	20.518	1.00	50.83	BBBB
ATOM	5665	OD1	ASP	B	238	-7.139	69.253	19.615	1.00	52.39	BBBB
ATOM	5666	OD2	ASP	B	238	-6.612	67.999	21.352	1.00	51.08	BBBB
ATOM	5667	C	ASP	B	238	-5.706	71.074	22.502	1.00	43.16	BBBB
ATOM	5668	O	ASP	B	238	-6.925	71.125	22.672	1.00	43.11	BBBB
ATOM	5669	N	THR	B	239	-4.840	71.023	23.510	1.00	41.20	BBBB
ATOM	5670	CA	THR	B	239	-5.276	71.093	24.901	1.00	42.58	BBBB
ATOM	5671	CB	THR	B	239	-5.681	69.719	25.477	1.00	43.94	BBBB
ATOM	5672	OG1	THR	B	239	-4.545	68.851	25.487	1.00	44.73	BBBB
ATOM	5673	CG2	THR	B	239	-6.796	69.092	24.653	1.00	45.02	BBBB
ATOM	5674	C	THR	B	239	-4.133	71.633	25.744	1.00	42.78	BBBB
ATOM	5675	O	THR	B	239	-2.971	71.493	25.377	1.00	42.53	BBBB
ATOM	5676	N	CYS	B	240	-4.457	72.269	26.865	1.00	43.53	BBBB
ATOM	5677	CA	CYS	B	240	-3.418	72.801	27.745	1.00	43.19	BBBB
ATOM	5678	C	CYS	B	240	-2.670	71.654	28.417	1.00	43.24	BBBB
ATOM	5679	O	CYS	B	240	-3.276	70.662	28.842	1.00	41.29	BBBB
ATOM	5680	CB	CYS	B	240	-4.031	73.692	28.827	1.00	43.38	BBBB
ATOM	5681	SG	CYS	B	240	-4.778	75.223	28.198	1.00	42.36	BBBB
ATOM	5682	N	PRO	B	241	-1.338	71.759	28.506	1.00	42.88	BBBB
ATOM	5683	CD	PRO	B	241	-0.444	72.761	27.909	1.00	43.66	BBBB
ATOM	5684	CA	PRO	B	241	-0.575	70.686	29.150	1.00	43.09	BBBB
ATOM	5685	CB	PRO	B	241	0.871	71.199	29.093	1.00	43.29	BBBB
ATOM	5686	CG	PRO	B	241	0.743	72.685	28.823	1.00	43.72	BBBB
ATOM	5687	C	PRO	B	241	-1.083	70.431	30.575	1.00	42.51	BBBB
ATOM	5688	O	PRO	B	241	-1.073	71.329	31.412	1.00	41.55	BBBB
ATOM	5689	N	PRO	B	242	-1.542	69.193	30.858	1.00	43.17	BBBB
ATOM	5690	CD	PRO	B	242	-1.541	68.034	29.950	1.00	40.97	BBBB
ATOM	5691	CA	PRO	B	242	-2.068	68.809	32.177	1.00	42.23	BBBB
ATOM	5692	CB	PRO	B	242	-2.514	67.359	31.972	1.00	40.84	BBBB
ATOM	5693	CG	PRO	B	242	-2.697	67.239	30.481	1.00	40.75	BBBB
ATOM	5694	C	PRO	B	242	-1.056	68.935	33.307	1.00	42.92	BBBB
ATOM	5695	O	PRO	B	242	0.141	68.750	33.108	1.00	42.53	BBBB

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ATOM	5696	N	LEU	B	243	-1.556	69.252	34.495	1.00	44.28	BBBB
ATOM	5697	CA	LEU	B	243	-0.718	69.402	35.671	1.00	46.48	BBBB
ATOM	5698	CB	LEU	B	243	-1.544	69.960	36.828	1.00	44.23	BBBB
ATOM	5699	CG	LEU	B	243	-2.343	71.232	36.554	1.00	44.79	BBBB
ATOM	5700	CD1	LEU	B	243	-3.098	71.613	37.814	1.00	43.50	BBBB
ATOM	5701	CD2	LEU	B	243	-1.427	72.362	36.110	1.00	44.07	BBBB
ATOM	5702	C	LEU	B	243	-0.142	68.042	36.062	1.00	48.57	BBBB
ATOM	5703	O	LEU	B	243	0.964	67.946	36.599	1.00	49.95	BBBB
ATOM	5704	N	MET	B	244	-0.906	66.992	35.786	1.00	49.47	BBBB
ATOM	5705	CA	MET	B	244	-0.497	65.630	36.095	1.00	49.88	BBBB
ATOM	5706	CB	MET	B	244	-1.458	65.027	37.130	1.00	50.96	BBBB
ATOM	5707	CG	MET	B	244	-1.260	65.513	38.565	1.00	50.70	BBBB
ATOM	5708	SD	MET	B	244	-2.735	65.319	39.636	1.00	47.09	BBBB
ATOM	5709	CE	MET	B	244	-2.927	67.030	40.259	1.00	40.15	BBBB
ATOM	5710	C	MET	B	244	-0.493	64.753	34.844	1.00	49.49	BBBB
ATOM	5711	O	MET	B	244	-1.376	64.872	34.002	1.00	51.23	BBBB
ATOM	5712	N	LEU	B	245	0.501	63.877	34.724	1.00	48.70	BBBB
ATOM	5713	CA	LEU	B	245	0.576	62.945	33.599	1.00	48.07	BBBB
ATOM	5714	CB	LEU	B	245	1.733	63.287	32.659	1.00	48.96	BBBB
ATOM	5715	CG	LEU	B	245	1.588	64.478	31.701	1.00	50.29	BBBB
ATOM	5716	CD1	LEU	B	245	2.905	64.696	30.969	1.00	47.80	BBBB
ATOM	5717	CD2	LEU	B	245	0.463	64.223	30.705	1.00	48.67	BBBB
ATOM	5718	C	LEU	B	245	0.764	61.529	34.124	1.00	47.56	BBBB
ATOM	5719	O	LEU	B	245	1.611	61.274	34.978	1.00	47.72	BBBB
ATOM	5720	N	TYR	B	246	-0.039	60.608	33.612	1.00	47.61	BBBB
ATOM	5721	CA	TYR	B	246	0.030	59.209	34.021	1.00	46.73	BBBB
ATOM	5722	CB	TYR	B	246	-1.071	58.401	33.324	1.00	44.24	BBBB
ATOM	5723	CG	TYR	B	246	-1.218	56.967	33.791	1.00	43.36	BBBB
ATOM	5724	CD1	TYR	B	246	-1.702	56.666	35.064	1.00	43.04	BBBB
ATOM	5725	CE1	TYR	B	246	-1.923	55.352	35.466	1.00	43.28	BBBB
ATOM	5726	CD2	TYR	B	246	-0.942	55.912	32.935	1.00	44.22	BBBB
ATOM	5727	CE2	TYR	B	246	-1.154	54.594	33.325	1.00	44.67	BBBB
ATOM	5728	CZ	TYR	B	246	-1.653	54.321	34.587	1.00	44.87	BBBB
ATOM	5729	OH	TYR	B	246	-1.924	53.018	34.940	1.00	45.39	BBBB
ATOM	5730	C	TYR	B	246	1.383	58.618	33.662	1.00	46.12	BBBB
ATOM	5731	O	TYR	B	246	1.968	58.956	32.637	1.00	46.43	BBBB
ATOM	5732	N	ASN	B	247	1.884	57.739	34.518	1.00	45.77	BBBB
ATOM	5733	CA	ASN	B	247	3.151	57.088	34.252	1.00	47.24	BBBB
ATOM	5734	CB	ASN	B	247	4.068	57.178	35.460	1.00	46.38	BBBB
ATOM	5735	CG	ASN	B	247	5.446	56.663	35.160	1.00	46.87	BBBB
ATOM	5736	OD1	ASN	B	247	5.601	55.605	34.539	1.00	46.47	BBBB
ATOM	5737	ND2	ASN	B	247	6.463	57.404	35.588	1.00	45.69	BBBB
ATOM	5738	C	ASN	B	247	2.825	55.631	33.966	1.00	48.63	BBBB
ATOM	5739	O	ASN	B	247	2.606	54.851	34.882	1.00	49.57	BBBB
ATOM	5740	N	PRO	B	248	2.799	55.244	32.685	1.00	50.77	BBBB
ATOM	5741	CD	PRO	B	248	3.387	56.004	31.568	1.00	51.00	BBBB
ATOM	5742	CA	PRO	B	248	2.485	53.868	32.271	1.00	52.09	BBBB
ATOM	5743	CB	PRO	B	248	2.727	53.902	30.764	1.00	51.05	BBBB
ATOM	5744	CG	PRO	B	248	3.853	54.902	30.643	1.00	50.53	BBBB
ATOM	5745	C	PRO	B	248	3.307	52.780	32.967	1.00	53.08	BBBB
ATOM	5746	O	PRO	B	248	2.800	51.697	33.267	1.00	52.68	BBBB
ATOM	5747	N	THR	B	249	4.573	53.076	33.225	1.00	53.08	BBBB
ATOM	5748	CA	THR	B	249	5.446	52.115	33.873	1.00	53.89	BBBB
ATOM	5749	CB	THR	B	249	6.917	52.541	33.725	1.00	54.85	BBBB
ATOM	5750	OG1	THR	B	249	7.276	52.534	32.338	1.00	53.83	BBBB
ATOM	5751	CG2	THR	B	249	7.826	51.587	34.479	1.00	56.78	BBBB
ATOM	5752	C	THR	B	249	5.121	51.927	35.356	1.00	53.29	BBBB
ATOM	5753	O	THR	B	249	4.811	50.820	35.800	1.00	54.88	BBBB
ATOM	5754	N	THR	B	250	5.179	53.017	36.111	1.00	51.08	BBBB
ATOM	5755	CA	THR	B	250	4.922	52.996	37.542	1.00	48.60	BBBB
ATOM	5756	CB	THR	B	250	5.602	54.185	38.198	1.00	48.51	BBBB
ATOM	5757	OG1	THR	B	250	4.992	55.393	37.730	1.00	50.91	BBBB
ATOM	5758	CG2	THR	B	250	7.068	54.215	37.822	1.00	46.51	BBBB
ATOM	5759	C	THR	B	250	3.448	53.007	37.942	1.00	49.02	BBBB
ATOM	5760	O	THR	B	250	3.128	52.993	39.134	1.00	47.95	BBBB
ATOM	5761	N	TYR	B	251	2.558	53.034	36.950	1.00	49.53	BBBB
ATOM	5762	CA	TYR	B	251	1.108	53.052	37.181	1.00	48.84	BBBB
ATOM	5763	CB	TYR	B	251	0.615	51.711	37.731	1.00	48.26	BBBB
ATOM	5764	CG	TYR	B	251	0.714	50.569	36.759	1.00	48.72	BBBB
ATOM	5765	CD1	TYR	B	251	1.936	49.955	36.505	1.00	48.09	BBBB
ATOM	5766	CE1	TYR	B	251	2.040	48.917	35.592	1.00	49.48	BBBB
ATOM	5767	CD2	TYR	B	251	-0.410	50.113	36.074	1.00	46.89	BBBB
ATOM	5768	CE2	TYR	B	251	-0.317	49.074	35.158	1.00	47.79	BBBB
ATOM	5769	CZ	TYR	B	251	0.912	48.480	34.922	1.00	48.88	BBBB
ATOM	5770	OH	TYR	B	251	1.028	47.446	34.016	1.00	51.79	BBBB

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ATOM	5771	C	TYR B 251	0.616	54.140	38.118	1.00	49.90	BBBB
ATOM	5772	O	TYR B 251	-0.427	53.980	38.743	1.00	51.56	BBBB
ATOM	5773	N	GLN B 252	1.356	55.233	38.242	1.00	50.65	BBBB
ATOM	5774	CA	GLN B 252	0.920	56.319	39.107	1.00	51.46	BBBB
ATOM	5775	CB	GLN B 252	1.793	56.376	40.362	1.00	52.30	BBBB
ATOM	5776	CG	GLN B 252	3.266	56.604	40.101	1.00	56.02	BBBB
ATOM	5777	CD	GLN B 252	4.076	56.642	41.387	1.00	60.02	BBBB
ATOM	5778	OE1	GLN B 252	3.779	57.418	42.300	1.00	62.84	BBBB
ATOM	5779	NE2	GLN B 252	5.107	55.801	41.468	1.00	61.37	BBBB
ATOM	5780	C	GLN B 252	0.923	57.675	38.378	1.00	51.97	BBBB
ATOM	5781	O	GLN B 252	1.367	57.782	37.230	1.00	50.68	BBBB
ATOM	5782	N	MET B 253	0.414	58.705	39.048	1.00	52.19	BBBB
ATOM	5783	CA	MET B 253	0.346	60.046	38.472	1.00	52.86	BBBB
ATOM	5784	CB	MET B 253	-0.899	60.763	38.984	1.00	53.39	BBBB
ATOM	5785	CG	MET B 253	-2.188	60.333	38.343	1.00	54.72	BBBB
ATOM	5786	SD	MET B 253	-2.273	60.878	36.652	1.00	59.93	BBBB
ATOM	5787	CE	MET B 253	-2.665	59.403	35.879	1.00	55.60	BBBB
ATOM	5788	C	MET B 253	1.559	60.908	38.791	1.00	52.95	BBBB
ATOM	5789	O	MET B 253	1.861	61.141	39.952	1.00	54.22	BBBB
ATOM	5790	N	ASP B 254	2.244	61.394	37.763	1.00	53.40	BBBB
ATOM	5791	CA	ASP B 254	3.404	62.252	37.969	1.00	54.52	BBBB
ATOM	5792	CB	ASP B 254	4.492	61.940	36.948	1.00	53.26	BBBB
ATOM	5793	CG	ASP B 254	5.189	60.640	37.234	1.00	53.98	BBBB
ATOM	5794	OD1	ASP B 254	5.980	60.186	36.379	1.00	51.42	BBBB
ATOM	5795	OD2	ASP B 254	4.943	60.077	38.323	1.00	54.06	BBBB
ATOM	5796	C	ASP B 254	3.020	63.717	37.844	1.00	56.59	BBBB
ATOM	5797	O	ASP B 254	1.983	64.054	37.281	1.00	57.87	BBBB
ATOM	5798	N	VAL B 255	3.854	64.589	38.392	1.00	58.33	BBBB
ATOM	5799	CA	VAL B 255	3.605	66.011	38.304	1.00	58.74	BBBB
ATOM	5800	CB	VAL B 255	4.284	66.772	39.439	1.00	58.39	BBBB
ATOM	5801	CG1	VAL B 255	4.436	68.234	39.058	1.00	59.18	BBBB
ATOM	5802	CG2	VAL B 255	3.463	66.651	40.701	1.00	56.92	BBBB
ATOM	5803	C	VAL B 255	4.200	66.470	36.987	1.00	60.51	BBBB
ATOM	5804	O	VAL B 255	5.311	66.078	36.634	1.00	61.70	BBBB
ATOM	5805	N	ASN B 256	3.452	67.282	36.251	1.00	61.41	BBBB
ATOM	5806	CA	ASN B 256	3.926	67.794	34.976	1.00	62.26	BBBB
ATOM	5807	CB	ASN B 256	2.791	67.816	33.954	1.00	60.88	BBBB
ATOM	5808	CG	ASN B 256	3.257	68.226	32.570	1.00	59.10	BBBB
ATOM	5809	OD1	ASN B 256	4.366	68.735	32.399	1.00	58.38	BBBB
ATOM	5810	ND2	ASN B 256	2.403	68.018	31.575	1.00	56.56	BBBB
ATOM	5811	C	ASN B 256	4.442	69.206	35.209	1.00	64.11	BBBB
ATOM	5812	O	ASN B 256	3.676	70.122	35.499	1.00	64.54	BBBB
ATOM	5813	N	PRO B 257	5.760	69.395	35.106	1.00	65.81	BBBB
ATOM	5814	CD	PRO B 257	6.783	68.406	34.716	1.00	66.39	BBBB
ATOM	5815	CA	PRO B 257	6.356	70.717	35.313	1.00	66.91	BBBB
ATOM	5816	CB	PRO B 257	7.852	70.420	35.272	1.00	67.97	BBBB
ATOM	5817	CG	PRO B 257	7.925	69.285	34.267	1.00	67.03	BBBB
ATOM	5818	C	PRO B 257	5.922	71.709	34.234	1.00	67.21	BBBB
ATOM	5819	O	PRO B 257	6.143	72.910	34.358	1.00	66.40	BBBB
ATOM	5820	N	GLU B 258	5.308	71.189	33.174	1.00	67.99	BBBB
ATOM	5821	CA	GLU B 258	4.831	72.012	32.067	1.00	68.23	BBBB
ATOM	5822	CB	GLU B 258	5.107	71.310	30.736	1.00	70.73	BBBB
ATOM	5823	CG	GLU B 258	6.543	70.838	30.580	1.00	77.36	BBBB
ATOM	5824	CD	GLU B 258	7.551	71.967	30.732	1.00	80.96	BBBB
ATOM	5825	OE1	GLU B 258	7.591	72.853	29.849	1.00	82.48	BBBB
ATOM	5826	OE2	GLU B 258	8.300	71.972	31.737	1.00	82.52	BBBB
ATOM	5827	C	GLU B 258	3.329	72.238	32.223	1.00	66.09	BBBB
ATOM	5828	O	GLU B 258	2.676	72.792	31.346	1.00	66.48	BBBB
ATOM	5829	N	GLY B 259	2.793	71.800	33.354	1.00	64.22	BBBB
ATOM	5830	CA	GLY B 259	1.374	71.939	33.619	1.00	61.97	BBBB
ATOM	5831	C	GLY B 259	0.873	73.364	33.625	1.00	60.36	BBBB
ATOM	5832	O	GLY B 259	1.533	74.277	34.121	1.00	59.77	BBBB
ATOM	5833	N	LYS B 260	-0.320	73.543	33.075	1.00	58.66	BBBB
ATOM	5834	CA	LYS B 260	-0.943	74.851	32.987	1.00	56.83	BBBB
ATOM	5835	CB	LYS B 260	-0.711	75.435	31.596	1.00	57.56	BBBB
ATOM	5836	CG	LYS B 260	0.752	75.523	31.204	1.00	57.07	BBBB
ATOM	5837	CD	LYS B 260	1.460	76.588	32.008	1.00	57.12	BBBB
ATOM	5838	CE	LYS B 260	1.191	77.972	31.459	1.00	58.20	BBBB
ATOM	5839	NZ	LYS B 260	1.942	78.221	30.191	1.00	59.08	BBBB
ATOM	5840	C	LYS B 260	-2.431	74.684	33.225	1.00	55.76	BBBB
ATOM	5841	O	LYS B 260	-2.950	73.572	33.189	1.00	55.76	BBBB
ATOM	5842	N	TYR B 261	-3.117	75.790	33.476	1.00	54.61	BBBB
ATOM	5843	CA	TYR B 261	-4.550	75.743	33.707	1.00	52.33	BBBB
ATOM	5844	CB	TYR B 261	-4.920	76.554	34.948	1.00	53.78	BBBB
ATOM	5845	CG	TYR B 261	-4.393	75.989	36.247	1.00	55.65	BBBB

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ATOM	5846	CD1	TYR	B	261	-3.053	76.137	36.609	1.00	56.77	BBBB
ATOM	5847	CE1	TYR	B	261	-2.573	75.637	37.820	1.00	56.09	BBBB
ATOM	5848	CD2	TYR	B	261	-5.243	75.324	37.129	1.00	56.41	BBBB
ATOM	5849	CE2	TYR	B	261	-4.776	74.824	38.340	1.00	56.86	BBBB
ATOM	5850	CZ	TYR	B	261	-3.443	74.982	38.680	1.00	57.42	BBBB
ATOM	5851	OH	TYR	B	261	-2.988	74.478	39.880	1.00	58.93	BBBB
ATOM	5852	C	TYR	B	261	-5.309	76.276	32.499	1.00	49.86	BBBB
ATOM	5853	O	TYR	B	261	-4.841	77.173	31.792	1.00	46.77	BBBB
ATOM	5854	N	SER	B	262	-6.488	75.712	32.270	1.00	49.00	BBBB
ATOM	5855	CA	SER	B	262	-7.315	76.119	31.141	1.00	48.72	BBBB
ATOM	5856	CB	SER	B	262	-7.998	74.898	30.530	1.00	46.78	BBBB
ATOM	5857	OG	SER	B	262	-7.034	74.086	29.894	1.00	46.67	BBBB
ATOM	5858	C	SER	B	262	-8.350	77.184	31.480	1.00	47.19	BBBB
ATOM	5859	O	SER	B	262	-9.329	76.926	32.180	1.00	47.58	BBBB
ATOM	5860	N	PHE	B	263	-8.108	78.386	30.972	1.00	45.47	BBBB
ATOM	5861	CA	PHE	B	263	-8.994	79.519	31.180	1.00	44.56	BBBB
ATOM	5862	CB	PHE	B	263	-8.238	80.658	31.860	1.00	44.19	BBBB
ATOM	5863	CG	PHE	B	263	-9.106	81.825	32.228	1.00	43.21	BBBB
ATOM	5864	CD1	PHE	B	263	-10.315	81.624	32.892	1.00	43.05	BBBB
ATOM	5865	CD2	PHE	B	263	-8.696	83.127	31.954	1.00	42.03	BBBB
ATOM	5866	CE1	PHE	B	263	-11.099	82.706	33.281	1.00	43.84	BBBB
ATOM	5867	CE2	PHE	B	263	-9.470	84.211	32.339	1.00	40.54	BBBB
ATOM	5868	CZ	PHE	B	263	-10.671	84.005	33.003	1.00	42.12	BBBB
ATOM	5869	C	PHE	B	263	-9.501	79.975	29.814	1.00	44.30	BBBB
ATOM	5870	O	PHE	B	263	-8.771	80.615	29.046	1.00	42.53	BBBB
ATOM	5871	N	GLY	B	264	-10.748	79.622	29.517	1.00	43.88	BBBB
ATOM	5872	CA	GLY	B	264	-11.337	79.981	28.243	1.00	44.89	BBBB
ATOM	5873	C	GLY	B	264	-10.572	79.361	27.093	1.00	45.67	BBBB
ATOM	5874	O	GLY	B	264	-10.622	78.155	26.876	1.00	47.30	BBBB
ATOM	5875	N	ALA	B	265	-9.846	80.181	26.353	1.00	45.86	BBBB
ATOM	5876	CA	ALA	B	265	-9.091	79.672	25.232	1.00	46.66	BBBB
ATOM	5877	CB	ALA	B	265	-9.541	80.348	23.948	1.00	46.67	BBBB
ATOM	5878	C	ALA	B	265	-7.611	79.893	25.452	1.00	47.35	BBBB
ATOM	5879	O	ALA	B	265	-6.845	80.017	24.499	1.00	47.85	BBBB
ATOM	5880	N	THR	B	266	-7.202	79.948	26.711	1.00	47.55	BBBB
ATOM	5881	CA	THR	B	266	-5.785	80.131	27.005	1.00	48.77	BBBB
ATOM	5882	CB	THR	B	266	-5.493	81.552	27.487	1.00	49.28	BBBB
ATOM	5883	OG1	THR	B	266	-6.321	81.839	28.620	1.00	50.27	BBBB
ATOM	5884	CG2	THR	B	266	-5.749	82.554	26.379	1.00	47.17	BBBB
ATOM	5885	C	THR	B	266	-5.289	79.166	28.076	1.00	48.27	BBBB
ATOM	5886	O	THR	B	266	-6.075	78.602	28.842	1.00	47.66	BBBB
ATOM	5887	N	CYS	B	267	-3.974	78.986	28.115	1.00	47.76	BBBB
ATOM	5888	CA	CYS	B	267	-3.341	78.109	29.093	1.00	48.01	BBBB
ATOM	5889	C	CYS	B	267	-2.544	78.982	30.046	1.00	48.22	BBBB
ATOM	5890	O	CYS	B	267	-1.453	79.458	29.711	1.00	46.07	BBBB
ATOM	5891	CB	CYS	B	267	-2.416	77.100	28.398	1.00	46.41	BBBB
ATOM	5892	SG	CYS	B	267	-3.257	76.075	27.157	1.00	43.04	BBBB
ATOM	5893	N	VAL	B	268	-3.095	79.180	31.237	1.00	49.18	BBBB
ATOM	5894	CA	VAL	B	268	-2.457	80.026	32.238	1.00	51.66	BBBB
ATOM	5895	CB	VAL	B	268	-3.470	81.041	32.837	1.00	49.67	BBBB
ATOM	5896	CG1	VAL	B	268	-3.946	81.995	31.765	1.00	48.10	BBBB
ATOM	5897	CG2	VAL	B	268	-4.647	80.302	33.441	1.00	47.38	BBBB
ATOM	5898	C	VAL	B	268	-1.800	79.281	33.393	1.00	53.52	BBBB
ATOM	5899	O	VAL	B	268	-2.125	78.128	33.684	1.00	52.62	BBBB
ATOM	5900	N	LYS	B	269	-0.876	79.982	34.049	1.00	56.11	BBBB
ATOM	5901	CA	LYS	B	269	-0.132	79.469	35.194	1.00	58.13	BBBB
ATOM	5902	CB	LYS	B	269	1.092	80.352	35.463	1.00	58.86	BBBB
ATOM	5903	CG	LYS	B	269	2.191	80.239	34.410	1.00	61.09	BBBB
ATOM	5904	CD	LYS	B	269	3.418	81.089	34.750	1.00	61.82	BBBB
ATOM	5905	CE	LYS	B	269	4.102	80.640	36.036	0.01	61.86	BBBB
ATOM	5906	NZ	LYS	B	269	3.282	80.894	37.255	0.01	62.07	BBBB
ATOM	5907	C	LYS	B	269	-0.973	79.403	36.461	1.00	57.89	BBBB
ATOM	5908	O	LYS	B	269	-0.640	78.688	37.393	1.00	59.26	BBBB
ATOM	5909	N	LYS	B	270	-2.073	80.137	36.489	1.00	58.12	BBBB
ATOM	5910	CA	LYS	B	270	-2.918	80.165	37.668	1.00	59.59	BBBB
ATOM	5911	CB	LYS	B	270	-2.323	81.173	38.661	1.00	60.74	BBBB
ATOM	5912	CG	LYS	B	270	-3.194	81.518	39.857	1.00	63.99	BBBB
ATOM	5913	CD	LYS	B	270	-2.849	82.908	40.423	1.00	66.07	BBBB
ATOM	5914	CE	LYS	B	270	-3.277	84.034	39.467	1.00	67.25	BBBB
ATOM	5915	NZ	LYS	B	270	-3.156	85.413	40.044	1.00	67.85	BBBB
ATOM	5916	C	LYS	B	270	-4.339	80.577	37.282	1.00	59.88	BBBB
ATOM	5917	O	LYS	B	270	-4.529	81.337	36.338	1.00	59.74	BBBB
ATOM	5918	N	CYS	B	271	-5.336	80.070	37.999	1.00	59.88	BBBB
ATOM	5919	CA	CYS	B	271	-6.709	80.447	37.709	1.00	60.40	BBBB
ATOM	5920	C	CYS	B	271	-7.066	81.778	38.357	1.00	62.64	BBBB

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ATOM	5921	O	CYS B 271	-6.532	82.131	39.410	1.00	62.49	BBBB
ATOM	5922	CB	CYS B 271	-7.688	79.398	38.215	1.00	57.67	BBBB
ATOM	5923	SG	CYS B 271	-7.838	77.930	37.164	1.00	59.06	BBBB
ATOM	5924	N	PRO B 272	-7.968	82.547	37.720	1.00	64.83	BBBB
ATOM	5925	CD	PRO B 272	-8.453	82.360	36.339	1.00	64.78	BBBB
ATOM	5926	CA	PRO B 272	-8.405	83.844	38.245	1.00	65.19	BBBB
ATOM	5927	CB	PRO B 272	-9.397	84.320	37.186	1.00	65.42	BBBB
ATOM	5928	CG	PRO B 272	-8.809	83.773	35.930	1.00	65.07	BBBB
ATOM	5929	C	PRO B 272	-9.062	83.618	39.604	1.00	65.58	BBBB
ATOM	5930	O	PRO B 272	-9.911	82.734	39.755	1.00	66.05	BBBB
ATOM	5931	N	ARG B 273	-8.674	84.421	40.585	1.00	66.00	BBBB
ATOM	5932	CA	ARG B 273	-9.192	84.283	41.940	1.00	67.82	BBBB
ATOM	5933	CB	ARG B 273	-8.771	85.503	42.767	1.00	70.89	BBBB
ATOM	5934	CG	ARG B 273	-7.247	85.658	42.863	1.00	75.30	BBBB
ATOM	5935	CD	ARG B 273	-6.795	87.023	43.394	1.00	78.19	BBBB
ATOM	5936	NE	ARG B 273	-7.225	87.277	44.767	1.00	80.85	BBBB
ATOM	5937	CZ	ARG B 273	-6.749	88.258	45.530	1.00	81.63	BBBB
ATOM	5938	NH1	ARG B 273	-5.821	89.081	45.057	1.00	81.49	BBBB
ATOM	5939	NH2	ARG B 273	-7.200	88.417	46.767	1.00	82.10	BBBB
ATOM	5940	C	ARG B 273	-10.696	84.036	42.080	1.00	67.52	BBBB
ATOM	5941	O	ARG B 273	-11.105	83.224	42.911	1.00	67.05	BBBB
ATOM	5942	N	ASN B 274	-11.514	84.712	41.271	1.00	67.74	BBBB
ATOM	5943	CA	ASN B 274	-12.975	84.558	41.344	1.00	67.53	BBBB
ATOM	5944	CB	ASN B 274	-13.700	85.623	40.516	1.00	70.00	BBBB
ATOM	5945	CG	ASN B 274	-12.860	86.845	40.277	1.00	73.39	BBBB
ATOM	5946	OD1	ASN B 274	-11.853	86.797	39.562	1.00	75.38	BBBB
ATOM	5947	ND2	ASN B 274	-13.262	87.957	40.876	1.00	75.26	BBBB
ATOM	5948	C	ASN B 274	-13.424	83.207	40.824	1.00	66.68	BBBB
ATOM	5949	O	ASN B 274	-14.494	82.706	41.206	1.00	65.06	BBBB
ATOM	5950	N	TYR B 275	-12.612	82.633	39.938	1.00	64.39	BBBB
ATOM	5951	CA	TYR B 275	-12.934	81.350	39.338	1.00	62.04	BBBB
ATOM	5952	CB	TYR B 275	-12.162	81.162	38.032	1.00	63.04	BBBB
ATOM	5953	CG	TYR B 275	-12.814	81.880	36.879	1.00	64.90	BBBB
ATOM	5954	CD1	TYR B 275	-12.609	83.243	36.675	1.00	65.65	BBBB
ATOM	5955	CE1	TYR B 275	-13.299	83.929	35.678	1.00	66.41	BBBB
ATOM	5956	CD2	TYR B 275	-13.722	81.217	36.047	1.00	65.34	BBBB
ATOM	5957	CE2	TYR B 275	-14.417	81.894	35.050	1.00	65.02	BBBB
ATOM	5958	CZ	TYR B 275	-14.201	83.247	34.874	1.00	65.17	BBBB
ATOM	5959	OH	TYR B 275	-14.881	83.926	33.901	1.00	64.85	BBBB
ATOM	5960	C	TYR B 275	-12.724	80.148	40.226	1.00	59.96	BBBB
ATOM	5961	O	TYR B 275	-11.949	80.177	41.176	1.00	61.63	BBBB
ATOM	5962	N	VAL B 276	-13.456	79.095	39.914	1.00	56.51	BBBB
ATOM	5963	CA	VAL B 276	-13.358	77.855	40.638	1.00	55.36	BBBB
ATOM	5964	CB	VAL B 276	-14.678	77.089	40.555	1.00	56.13	BBBB
ATOM	5965	CG1	VAL B 276	-14.504	75.661	41.058	1.00	54.80	BBBB
ATOM	5966	CG2	VAL B 276	-15.728	77.822	41.357	1.00	56.14	BBBB
ATOM	5967	C	VAL B 276	-12.268	77.044	39.961	1.00	54.68	BBBB
ATOM	5968	O	VAL B 276	-12.069	77.157	38.758	1.00	54.27	BBBB
ATOM	5969	N	VAL B 277	-11.544	76.243	40.733	1.00	54.11	BBBB
ATOM	5970	CA	VAL B 277	-10.499	75.401	40.164	1.00	51.42	BBBB
ATOM	5971	CB	VAL B 277	-9.160	75.587	40.889	1.00	49.12	BBBB
ATOM	5972	CG1	VAL B 277	-8.107	74.740	40.230	1.00	47.57	BBBB
ATOM	5973	CG2	VAL B 277	-8.743	77.050	40.849	1.00	48.54	BBBB
ATOM	5974	C	VAL B 277	-10.940	73.958	40.309	1.00	51.18	BBBB
ATOM	5975	O	VAL B 277	-11.175	73.492	41.419	1.00	51.13	BBBB
ATOM	5976	N	THR B 278	-11.080	73.254	39.192	1.00	51.91	BBBB
ATOM	5977	CA	THR B 278	-11.495	71.854	39.246	1.00	53.54	BBBB
ATOM	5978	CB	THR B 278	-12.270	71.440	37.985	1.00	53.89	BBBB
ATOM	5979	OG1	THR B 278	-11.432	71.612	36.834	1.00	54.86	BBBB
ATOM	5980	CG2	THR B 278	-13.536	72.272	37.838	1.00	53.16	BBBB
ATOM	5981	C	THR B 278	-10.295	70.916	39.390	1.00	54.17	BBBB
ATOM	5982	O	THR B 278	-9.144	71.353	39.400	1.00	54.63	BBBB
ATOM	5983	N	ASP B 279	-10.574	69.622	39.502	1.00	54.93	BBBB
ATOM	5984	CA	ASP B 279	-9.519	68.627	39.638	1.00	56.27	BBBB
ATOM	5985	CB	ASP B 279	-10.061	67.367	40.313	1.00	56.20	BBBB
ATOM	5986	CG	ASP B 279	-10.697	67.654	41.653	1.00	57.63	BBBB
ATOM	5987	OD1	ASP B 279	-10.073	68.380	42.463	1.00	58.18	BBBB
ATOM	5988	OD2	ASP B 279	-11.816	67.145	41.897	1.00	57.58	BBBB
ATOM	5989	C	ASP B 279	-8.933	68.261	38.275	1.00	56.47	BBBB
ATOM	5990	O	ASP B 279	-8.023	67.432	38.179	1.00	56.91	BBBB
ATOM	5991	N	HIS B 280	-9.453	68.892	37.227	1.00	54.94	BBBB
ATOM	5992	CA	HIS B 280	-8.994	68.625	35.876	1.00	53.29	BBBB
ATOM	5993	CB	HIS B 280	-10.191	68.465	34.943	1.00	52.44	BBBB
ATOM	5994	CG	HIS B 280	-11.106	67.347	35.333	1.00	54.54	BBBB
ATOM	5995	CD2	HIS B 280	-12.355	67.359	35.857	1.00	55.05	BBBB

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ATOM	5996	ND1	HIS	B	280	-10.749	66.020	35.228	1.00	54.20	BBBB
ATOM	5997	CE1	HIS	B	280	-11.739	65.265	35.672	1.00	55.16	BBBB
ATOM	5998	NE2	HIS	B	280	-12.723	66.054	36.059	1.00	52.43	BBBB
ATOM	5999	C	HIS	B	280	-8.083	69.719	35.357	1.00	53.12	BBBB
ATOM	6000	O	HIS	B	280	-7.927	69.864	34.148	1.00	55.46	BBBB
ATOM	6001	N	GLY	B	281	-7.490	70.491	36.264	1.00	51.26	BBBB
ATOM	6002	CA	GLY	B	281	-6.586	71.552	35.854	1.00	49.90	BBBB
ATOM	6003	C	GLY	B	281	-7.191	72.622	34.962	1.00	49.45	BBBB
ATOM	6004	O	GLY	B	281	-6.610	73.000	33.942	1.00	49.37	BBBB
ATOM	6005	N	SER	B	282	-8.355	73.128	35.349	1.00	49.27	BBBB
ATOM	6006	CA	SER	B	282	-9.020	74.158	34.565	1.00	48.44	BBBB
ATOM	6007	CB	SER	B	282	-9.867	73.502	33.485	1.00	45.87	BBBB
ATOM	6008	OG	SER	B	282	-10.864	72.693	34.072	1.00	42.19	BBBB
ATOM	6009	C	SER	B	282	-9.903	75.072	35.419	1.00	50.74	BBBB
ATOM	6010	O	SER	B	282	-10.473	74.644	36.433	1.00	50.26	BBBB
ATOM	6011	N	CYS	B	283	-10.011	76.330	34.986	1.00	51.84	BBBB
ATOM	6012	CA	CYS	B	283	-10.814	77.347	35.660	1.00	52.85	BBBB
ATOM	6013	C	CYS	B	283	-12.249	77.315	35.134	1.00	54.05	BBBB
ATOM	6014	O	CYS	B	283	-12.487	77.462	33.943	1.00	55.43	BBBB
ATOM	6015	CB	CYS	B	283	-10.200	78.711	35.411	1.00	52.75	BBBB
ATOM	6016	SG	CYS	B	283	-8.386	78.653	35.343	1.00	56.09	BBBB
ATOM	6017	N	VAL	B	284	-13.200	77.139	36.037	1.00	55.40	BBBB
ATOM	6018	CA	VAL	B	284	-14.601	77.039	35.680	1.00	58.34	BBBB
ATOM	6019	CB	VAL	B	284	-15.128	75.640	36.104	1.00	58.19	BBBB
ATOM	6020	CG1	VAL	B	284	-16.621	75.659	36.310	1.00	57.82	BBBB
ATOM	6021	CG2	VAL	B	284	-14.762	74.619	35.043	1.00	58.26	BBBB
ATOM	6022	C	VAL	B	284	-15.453	78.151	36.302	1.00	61.53	BBBB
ATOM	6023	O	VAL	B	284	-15.035	78.800	37.256	1.00	60.89	BBBB
ATOM	6024	N	ARG	B	285	-16.644	78.374	35.744	1.00	64.81	BBBB
ATOM	6025	CA	ARG	B	285	-17.547	79.403	36.243	1.00	66.28	BBBB
ATOM	6026	CB	ARG	B	285	-18.481	79.907	35.134	1.00	65.73	BBBB
ATOM	6027	CG	ARG	B	285	-17.849	80.826	34.089	1.00	64.92	BBBB
ATOM	6028	CD	ARG	B	285	-18.926	81.398	33.148	1.00	65.37	BBBB
ATOM	6029	NE	ARG	B	285	-18.382	82.083	31.972	1.00	65.19	BBBB
ATOM	6030	CZ	ARG	B	285	-17.533	83.102	32.029	1.00	63.83	BBBB
ATOM	6031	NH1	ARG	B	285	-17.130	83.556	33.204	1.00	65.89	BBBB
ATOM	6032	NH2	ARG	B	285	-17.082	83.664	30.918	1.00	61.88	BBBB
ATOM	6033	C	ARG	B	285	-18.397	78.885	37.387	1.00	68.58	BBBB
ATOM	6034	O	ARG	B	285	-18.930	79.678	38.157	1.00	69.77	BBBB
ATOM	6035	N	ALA	B	286	-18.535	77.565	37.498	1.00	71.05	BBBB
ATOM	6036	CA	ALA	B	286	-19.343	76.979	38.568	1.00	74.87	BBBB
ATOM	6037	CB	ALA	B	286	-20.805	77.333	38.354	1.00	73.86	BBBB
ATOM	6038	C	ALA	B	286	-19.198	75.460	38.717	1.00	77.82	BBBB
ATOM	6039	O	ALA	B	286	-18.807	74.768	37.783	1.00	78.30	BBBB
ATOM	6040	N	CYS	B	287	-19.536	74.950	39.899	1.00	81.25	BBBB
ATOM	6041	CA	CYS	B	287	-19.455	73.519	40.190	1.00	83.95	BBBB
ATOM	6042	C	CYS	B	287	-20.695	72.749	39.726	1.00	85.20	BBBB
ATOM	6043	O	CYS	B	287	-21.616	73.324	39.151	1.00	83.93	BBBB
ATOM	6044	CB	CYS	B	287	-19.263	73.292	41.693	1.00	85.54	BBBB
ATOM	6045	SG	CYS	B	287	-17.797	74.087	42.424	1.00	88.49	BBBB
ATOM	6046	N	GLY	B	288	-20.707	71.446	40.002	1.00	87.75	BBBB
ATOM	6047	CA	GLY	B	288	-21.814	70.587	39.608	1.00	90.64	BBBB
ATOM	6048	C	GLY	B	288	-23.090	70.758	40.409	1.00	93.05	BBBB
ATOM	6049	O	GLY	B	288	-23.168	71.609	41.294	1.00	94.02	BBBB
ATOM	6050	N	ALA	B	289	-24.089	69.934	40.102	1.00	95.14	BBBB
ATOM	6051	CA	ALA	B	289	-25.391	69.995	40.771	1.00	97.32	BBBB
ATOM	6052	CB	ALA	B	289	-26.457	69.326	39.895	1.00	96.64	BBBB
ATOM	6053	C	ALA	B	289	-25.429	69.393	42.177	1.00	98.85	BBBB
ATOM	6054	O	ALA	B	289	-26.304	69.733	42.981	1.00	99.11	BBBB
ATOM	6055	N	ALA	B	290	-24.495	68.495	42.476	1.00	99.90	BBBB
ATOM	6056	CA	ALA	B	290	-24.455	67.864	43.789	1.00	100.64	BBBB
ATOM	6057	CB	ALA	B	290	-24.590	66.352	43.645	1.00	100.38	BBBB
ATOM	6058	C	ALA	B	290	-23.154	68.210	44.496	1.00	101.40	BBBB
ATOM	6059	O	ALA	B	290	-22.439	67.324	44.959	1.00	102.21	BBBB
ATOM	6060	N	SER	B	291	-22.855	69.504	44.581	1.00	101.71	BBBB
ATOM	6061	CA	SER	B	291	-21.626	69.965	45.219	1.00	101.89	BBBB
ATOM	6062	CB	SER	B	291	-20.445	69.789	44.258	1.00	102.57	BBBB
ATOM	6063	OG	SER	B	291	-20.409	68.483	43.708	1.00	103.70	BBBB
ATOM	6064	C	SER	B	291	-21.730	71.437	45.607	1.00	101.58	BBBB
ATOM	6065	O	SER	B	291	-22.790	72.050	45.481	1.00	101.71	BBBB
ATOM	6066	N	TYR	B	292	-20.621	71.997	46.082	1.00	100.88	BBBB
ATOM	6067	CA	TYR	B	292	-20.571	73.404	46.454	1.00	100.47	BBBB
ATOM	6068	CB	TYR	B	292	-21.271	73.634	47.802	1.00	102.26	BBBB
ATOM	6069	CG	TYR	B	292	-20.595	73.032	49.010	1.00	104.07	BBBB
ATOM	6070	CD1	TYR	B	292	-19.465	73.626	49.569	1.00	104.79	BBBB

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ATOM	6071	CE1	TYR	B	292	-18.864	73.103	50.707	1.00105.79	BBBB
ATOM	6072	CD2	TYR	B	292	-21.107	71.888	49.621	1.00104.65	BBBB
ATOM	6073	CE2	TYR	B	292	-20.512	71.355	50.761	1.00105.55	BBBB
ATOM	6074	CZ	TYR	B	292	-19.392	71.970	51.298	1.00105.87	BBBB
ATOM	6075	OH	TYR	B	292	-18.802	71.462	52.432	1.00106.78	BBBB
ATOM	6076	C	TYR	B	292	-19.120	73.887	46.479	1.00 99.25	BBBB
ATOM	6077	O	TYR	B	292	-18.196	73.080	46.405	1.00 99.29	BBBB
ATOM	6078	N	GLU	B	293	-18.927	75.200	46.571	1.00 97.58	BBBB
ATOM	6079	CA	GLU	B	293	-17.591	75.792	46.563	1.00 95.60	BBBB
ATOM	6080	CB	GLU	B	293	-17.638	77.148	45.855	1.00 92.73	BBBB
ATOM	6081	CG	GLU	B	293	-18.048	77.056	44.395	1.00 88.53	BBBB
ATOM	6082	CD	GLU	B	293	-18.371	78.402	43.782	1.00 85.48	BBBB
ATOM	6083	OE1	GLU	B	293	-17.497	79.290	43.786	1.00 82.30	BBBB
ATOM	6084	OE2	GLU	B	293	-19.506	78.565	43.292	1.00 84.37	BBBB
ATOM	6085	C	GLU	B	293	-16.961	75.957	47.939	1.00 96.35	BBBB
ATOM	6086	O	GLU	B	293	-17.603	76.428	48.872	1.00 95.96	BBBB
ATOM	6087	N	MET	B	294	-15.692	75.572	48.044	1.00 97.95	BBBB
ATOM	6088	CA	MET	B	294	-14.943	75.662	49.295	1.00 99.79	BBBB
ATOM	6089	CB	MET	B	294	-14.462	74.260	49.726	1.00 99.55	BBBB
ATOM	6090	CG	MET	B	294	-13.732	74.202	51.080	1.00 99.83	BBBB
ATOM	6091	SD	MET	B	294	-13.313	72.522	51.668	1.00 97.74	BBBB
ATOM	6092	CE	MET	B	294	-11.629	72.356	51.084	1.00 98.77	BBBB
ATOM	6093	C	MET	B	294	-13.750	76.610	49.134	1.00100.92	BBBB
ATOM	6094	O	MET	B	294	-13.125	76.671	48.078	1.00100.28	BBBB
ATOM	6095	N	GLU	B	295	-13.455	77.356	50.193	1.00103.38	BBBB
ATOM	6096	CA	GLU	B	295	-12.347	78.307	50.206	1.00105.65	BBBB
ATOM	6097	CB	GLU	B	295	-12.781	79.590	50.918	1.00106.15	BBBB
ATOM	6098	CG	GLU	B	295	-11.671	80.597	51.160	1.00108.32	BBBB
ATOM	6099	CD	GLU	B	295	-11.187	81.250	49.885	1.00109.38	BBBB
ATOM	6100	OE1	GLU	B	295	-10.317	82.144	49.962	1.00110.22	BBBB
ATOM	6101	OE2	GLU	B	295	-11.680	80.869	48.804	1.00110.24	BBBB
ATOM	6102	C	GLU	B	295	-11.175	77.680	50.953	1.00106.95	BBBB
ATOM	6103	O	GLU	B	295	-11.361	77.099	52.022	1.00107.94	BBBB
ATOM	6104	N	SER	B	296	-9.971	77.795	50.399	1.00107.83	BBBB
ATOM	6105	CA	SER	B	296	-8.795	77.220	51.047	1.00108.43	BBBB
ATOM	6106	CB	SER	B	296	-8.856	75.690	50.973	1.00108.89	BBBB
ATOM	6107	OG	SER	B	296	-9.039	75.244	49.641	1.00109.75	BBBB
ATOM	6108	C	SER	B	296	-7.464	77.713	50.482	1.00108.53	BBBB
ATOM	6109	O	SER	B	296	-7.126	77.447	49.327	1.00107.82	BBBB
ATOM	6110	N	ASP	B	297	-6.713	78.422	51.323	1.00109.22	BBBB
ATOM	6111	CA	ASP	B	297	-5.409	78.978	50.963	1.00109.44	BBBB
ATOM	6112	CB	ASP	B	297	-4.565	77.932	50.216	1.00110.66	BBBB
ATOM	6113	CG	ASP	B	297	-3.186	78.451	49.827	1.00111.95	BBBB
ATOM	6114	OD1	ASP	B	297	-3.106	79.344	48.957	1.00112.51	BBBB
ATOM	6115	OD2	ASP	B	297	-2.180	77.965	50.390	1.00112.38	BBBB
ATOM	6116	C	ASP	B	297	-5.588	80.225	50.104	1.00108.68	BBBB
ATOM	6117	O	ASP	B	297	-4.973	81.262	50.353	1.00108.47	BBBB
ATOM	6118	N	GLY	B	298	-6.451	80.113	49.101	1.00107.68	BBBB
ATOM	6119	CA	GLY	B	298	-6.713	81.220	48.202	1.00105.62	BBBB
ATOM	6120	C	GLY	B	298	-7.507	80.718	47.014	1.00104.11	BBBB
ATOM	6121	O	GLY	B	298	-8.373	81.417	46.488	1.00104.70	BBBB
ATOM	6122	N	ALA	B	299	-7.209	79.492	46.594	1.00101.80	BBBB
ATOM	6123	CA	ALA	B	299	-7.897	78.876	45.468	1.00 99.56	BBBB
ATOM	6124	CB	ALA	B	299	-7.054	77.737	44.900	1.00 98.59	BBBB
ATOM	6125	C	ALA	B	299	-9.265	78.353	45.901	1.00 97.89	BBBB
ATOM	6126	O	ALA	B	299	-9.431	77.848	47.012	1.00 97.49	BBBB
ATOM	6127	N	ARG	B	300	-10.243	78.478	45.014	1.00 95.44	BBBB
ATOM	6128	CA	ARG	B	300	-11.593	78.019	45.300	1.00 93.08	BBBB
ATOM	6129	CB	ARG	B	300	-12.580	79.095	44.851	1.00 92.25	BBBB
ATOM	6130	CG	ARG	B	300	-14.040	78.808	45.121	1.00 90.36	BBBB
ATOM	6131	CD	ARG	B	300	-14.845	80.091	44.952	1.00 88.32	BBBB
ATOM	6132	NE	ARG	B	300	-14.621	81.016	46.059	1.00 84.35	BBBB
ATOM	6133	CZ	ARG	B	300	-15.368	81.050	47.156	1.00 82.76	BBBB
ATOM	6134	NH1	ARG	B	300	-16.391	80.217	47.289	1.00 80.39	BBBB
ATOM	6135	NH2	ARG	B	300	-15.088	81.909	48.124	1.00 81.83	BBBB
ATOM	6136	C	ARG	B	300	-11.832	76.702	44.565	1.00 92.13	BBBB
ATOM	6137	O	ARG	B	300	-11.664	76.629	43.352	1.00 91.58	BBBB
ATOM	6138	N	ALA	B	301	-12.208	75.663	45.305	1.00 91.61	BBBB
ATOM	6139	CA	ALA	B	301	-12.445	74.345	44.720	1.00 91.67	BBBB
ATOM	6140	CB	ALA	B	301	-11.394	73.368	45.221	1.00 91.32	BBBB
ATOM	6141	C	ALA	B	301	-13.839	73.808	45.028	1.00 92.02	BBBB
ATOM	6142	O	ALA	B	301	-14.527	74.323	45.903	1.00 92.15	BBBB
ATOM	6143	N	CYS	B	302	-14.250	72.768	44.305	1.00 92.51	BBBB
ATOM	6144	CA	CYS	B	302	-15.568	72.166	44.508	1.00 93.39	BBBB
ATOM	6145	C	CYS	B	302	-15.521	71.031	45.535	1.00 94.43	BBBB

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ATOM	6146	O	CYS B 302	-14.460	70.472	45.808	1.00	94.83	BBBB
ATOM	6147	CB	CYS B 302	-16.123	71.643	43.180	1.00	91.89	BBBB
ATOM	6148	SG	CYS B 302	-16.241	72.899	41.860	1.00	91.26	BBBB
ATOM	6149	N	SER B 303	-16.677	70.694	46.100	1.00	95.63	BBBB
ATOM	6150	CA	SER B 303	-16.764	69.642	47.111	1.00	97.03	BBBB
ATOM	6151	CB	SER B 303	-16.555	70.247	48.502	1.00	97.11	BBBB
ATOM	6152	OG	SER B 303	-16.900	69.325	49.520	1.00	97.14	BBBB
ATOM	6153	C	SER B 303	-18.108	68.922	47.072	1.00	97.97	BBBB
ATOM	6154	O	SER B 303	-19.151	69.558	46.933	1.00	99.34	BBBB
ATOM	6155	N	ALA B 304	-18.081	67.597	47.206	1.00	98.24	BBBB
ATOM	6156	CA	ALA B 304	-19.307	66.799	47.183	1.00	98.28	BBBB
ATOM	6157	CB	ALA B 304	-18.965	65.316	47.224	1.00	98.20	BBBB
ATOM	6158	C	ALA B 304	-20.254	67.153	48.332	1.00	98.32	BBBB
ATOM	6159	O	ALA B 304	-19.833	67.364	49.469	1.00	97.72	BBBB
ATOM	6160	N	CYS B 305	-21.543	67.207	48.020	1.00	99.11	BBBB
ATOM	6161	CA	CYS B 305	-22.569	67.550	48.998	1.00	100.24	BBBB
ATOM	6162	C	CYS B 305	-22.807	66.486	50.070	1.00	100.45	BBBB
ATOM	6163	O	CYS B 305	-23.212	65.362	49.771	1.00	99.80	BBBB
ATOM	6164	CB	CYS B 305	-23.884	67.865	48.268	1.00	100.67	BBBB
ATOM	6165	SG	CYS B 305	-23.920	69.505	47.466	1.00	101.44	BBBB
ATOM	6166	N	ALA B 306	-22.559	66.864	51.323	1.00	101.02	BBBB
ATOM	6167	CA	ALA B 306	-22.739	65.975	52.470	1.00	101.69	BBBB
ATOM	6168	CB	ALA B 306	-22.349	66.697	53.756	1.00	101.97	BBBB
ATOM	6169	C	ALA B 306	-24.180	65.482	52.569	1.00	102.04	BBBB
ATOM	6170	O	ALA B 306	-24.431	64.340	52.959	1.00	102.65	BBBB
ATOM	6171	N	GLY B 307	-25.123	66.353	52.223	1.00	101.47	BBBB
ATOM	6172	CA	GLY B 307	-26.531	65.992	52.261	1.00	100.77	BBBB
ATOM	6173	C	GLY B 307	-27.269	66.762	51.183	1.00	100.52	BBBB
ATOM	6174	O	GLY B 307	-26.654	67.194	50.206	1.00	100.41	BBBB
ATOM	6175	N	ALA B 308	-28.581	66.919	51.330	1.00	100.00	BBBB
ATOM	6176	CA	ALA B 308	-29.349	67.683	50.353	1.00	99.65	BBBB
ATOM	6177	CB	ALA B 308	-30.843	67.539	50.623	1.00	100.11	BBBB
ATOM	6178	C	ALA B 308	-28.896	69.129	50.571	1.00	99.19	BBBB
ATOM	6179	O	ALA B 308	-29.487	69.867	51.363	1.00	99.68	BBBB
ATOM	6180	N	CYS B 309	-27.834	69.519	49.869	1.00	98.26	BBBB
ATOM	6181	CA	CYS B 309	-27.236	70.849	49.999	1.00	96.80	BBBB
ATOM	6182	C	CYS B 309	-28.018	72.085	49.571	1.00	95.02	BBBB
ATOM	6183	O	CYS B 309	-29.213	72.039	49.269	1.00	94.74	BBBB
ATOM	6184	CB	CYS B 309	-25.878	70.880	49.287	1.00	97.56	BBBB
ATOM	6185	SG	CYS B 309	-25.853	70.084	47.647	1.00	98.57	BBBB
ATOM	6186	N	ARG B 310	-27.288	73.197	49.568	1.00	93.50	BBBB
ATOM	6187	CA	ARG B 310	-27.786	74.511	49.194	1.00	91.30	BBBB
ATOM	6188	CB	ARG B 310	-26.657	75.528	49.364	1.00	92.63	BBBB
ATOM	6189	CG	ARG B 310	-25.786	75.244	50.592	1.00	93.80	BBBB
ATOM	6190	CD	ARG B 310	-24.364	75.774	50.444	1.00	93.85	BBBB
ATOM	6191	NE	ARG B 310	-23.498	75.291	51.517	0.01	94.21	BBBB
ATOM	6192	CZ	ARG B 310	-22.202	75.570	51.619	0.01	94.37	BBBB
ATOM	6193	NH1	ARG B 310	-21.611	76.335	50.711	0.01	94.60	BBBB
ATOM	6194	NH2	ARG B 310	-21.494	75.079	52.628	0.01	94.59	BBBB
ATOM	6195	C	ARG B 310	-28.197	74.423	47.733	1.00	88.78	BBBB
ATOM	6196	O	ARG B 310	-27.419	73.959	46.899	1.00	89.06	BBBB
ATOM	6197	N	LYS B 311	-29.409	74.868	47.419	1.00	86.20	BBBB
ATOM	6198	CA	LYS B 311	-29.900	74.804	46.043	1.00	83.33	BBBB
ATOM	6199	CB	LYS B 311	-31.433	74.730	46.042	1.00	81.98	BBBB
ATOM	6200	CG	LYS B 311	-32.138	76.049	46.256	1.00	80.30	BBBB
ATOM	6201	CD	LYS B 311	-32.774	76.516	44.962	1.00	79.79	BBBB
ATOM	6202	CE	LYS B 311	-33.810	75.520	44.468	1.00	78.65	BBBB
ATOM	6203	NZ	LYS B 311	-34.512	75.984	43.243	1.00	79.12	BBBB
ATOM	6204	C	LYS B 311	-29.422	75.955	45.150	1.00	81.30	BBBB
ATOM	6205	O	LYS B 311	-29.561	77.130	45.491	1.00	80.79	BBBB
ATOM	6206	N	VAL B 312	-28.857	75.595	44.001	1.00	78.69	BBBB
ATOM	6207	CA	VAL B 312	-28.349	76.570	43.045	1.00	77.04	BBBB
ATOM	6208	CB	VAL B 312	-26.997	76.111	42.471	1.00	76.65	BBBB
ATOM	6209	CG1	VAL B 312	-26.399	77.205	41.605	1.00	76.83	BBBB
ATOM	6210	CG2	VAL B 312	-26.054	75.753	43.607	1.00	76.21	BBBB
ATOM	6211	C	VAL B 312	-29.342	76.771	41.896	1.00	75.82	BBBB
ATOM	6212	O	VAL B 312	-30.023	75.829	41.490	1.00	76.62	BBBB
ATOM	6213	N	CYS B 313	-29.419	77.998	41.380	1.00	73.10	BBBB
ATOM	6214	CA	CYS B 313	-30.336	78.328	40.287	1.00	69.11	BBBB
ATOM	6215	C	CYS B 313	-29.643	79.027	39.128	1.00	67.68	BBBB
ATOM	6216	O	CYS B 313	-28.899	79.991	39.332	1.00	67.77	BBBB
ATOM	6217	CB	CYS B 313	-31.468	79.225	40.798	1.00	67.86	BBBB
ATOM	6218	SG	CYS B 313	-32.502	78.447	42.073	1.00	67.91	BBBB
ATOM	6219	N	ASN B 314	-29.894	78.544	37.911	1.00	66.79	BBBB
ATOM	6220	CA	ASN B 314	-29.306	79.137	36.710	1.00	65.19	BBBB

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ATOM	6221	CB	ASN	B	314	-29.645	78.312	35.468	1.00	65.90	BBBB
ATOM	6222	CG	ASN	B	314	-28.905	76.992	35.415	1.00	67.36	BBBB
ATOM	6223	OD1	ASN	B	314	-27.679	76.944	35.544	1.00	66.00	BBBB
ATOM	6224	ND2	ASN	B	314	-29.650	75.907	35.208	1.00	67.98	BBBB
ATOM	6225	C	ASN	B	314	-29.846	80.546	36.516	1.00	64.27	BBBB
ATOM	6226	O	ASN	B	314	-31.039	80.796	36.705	1.00	64.02	BBBB
ATOM	6227	N	GLY	B	315	-28.969	81.463	36.132	1.00	62.81	BBBB
ATOM	6228	CA	GLY	B	315	-29.394	82.832	35.923	1.00	62.27	BBBB
ATOM	6229	C	GLY	B	315	-29.923	83.069	34.524	1.00	61.63	BBBB
ATOM	6230	O	GLY	B	315	-30.139	82.130	33.762	1.00	60.61	BBBB
ATOM	6231	N	ILE	B	316	-30.140	84.333	34.189	1.00	61.26	BBBB
ATOM	6232	CA	ILE	B	316	-30.635	84.692	32.875	1.00	61.15	BBBB
ATOM	6233	CB	ILE	B	316	-31.347	86.061	32.911	1.00	60.46	BBBB
ATOM	6234	CG2	ILE	B	316	-31.093	86.835	31.627	1.00	60.57	BBBB
ATOM	6235	CG1	ILE	B	316	-32.845	85.851	33.114	1.00	59.15	BBBB
ATOM	6236	CD1	ILE	B	316	-33.200	85.270	34.438	1.00	59.51	BBBB
ATOM	6237	C	ILE	B	316	-29.485	84.732	31.884	1.00	61.78	BBBB
ATOM	6238	O	ILE	B	316	-28.439	85.313	32.159	1.00	62.20	BBBB
ATOM	6239	N	GLY	B	317	-29.687	84.105	30.732	1.00	63.12	BBBB
ATOM	6240	CA	GLY	B	317	-28.658	84.075	29.708	1.00	64.84	BBBB
ATOM	6241	C	GLY	B	317	-27.883	82.771	29.684	1.00	65.69	BBBB
ATOM	6242	O	GLY	B	317	-26.887	82.638	28.972	1.00	66.28	BBBB
ATOM	6243	N	ILE	B	318	-28.347	81.801	30.463	1.00	66.14	BBBB
ATOM	6244	CA	ILE	B	318	-27.693	80.504	30.547	1.00	67.55	BBBB
ATOM	6245	CB	ILE	B	318	-26.694	80.467	31.750	1.00	68.45	BBBB
ATOM	6246	CG2	ILE	B	318	-26.839	79.170	32.544	1.00	67.29	BBBB
ATOM	6247	CG1	ILE	B	318	-25.265	80.650	31.230	1.00	68.27	BBBB
ATOM	6248	CD1	ILE	B	318	-24.207	80.693	32.319	1.00	70.29	BBBB
ATOM	6249	C	ILE	B	318	-28.722	79.395	30.691	1.00	67.99	BBBB
ATOM	6250	O	ILE	B	318	-29.704	79.540	31.419	1.00	67.90	BBBB
ATOM	6251	N	GLY	B	319	-28.492	78.290	29.986	1.00	68.51	BBBB
ATOM	6252	CA	GLY	B	319	-29.408	77.166	30.049	1.00	69.26	BBBB
ATOM	6253	C	GLY	B	319	-30.763	77.461	29.432	1.00	69.48	BBBB
ATOM	6254	O	GLY	B	319	-30.851	77.911	28.287	1.00	68.54	BBBB
ATOM	6255	N	GLU	B	320	-31.824	77.203	30.193	1.00	69.59	BBBB
ATOM	6256	CA	GLU	B	320	-33.178	77.442	29.716	1.00	70.78	BBBB
ATOM	6257	CB	GLU	B	320	-34.192	76.649	30.549	1.00	71.27	BBBB
ATOM	6258	CG	GLU	B	320	-34.256	77.030	32.023	1.00	74.88	BBBB
ATOM	6259	CD	GLU	B	320	-33.161	76.385	32.873	1.00	77.60	BBBB
ATOM	6260	OE1	GLU	B	320	-31.960	76.580	32.569	1.00	78.05	BBBB
ATOM	6261	OE2	GLU	B	320	-33.509	75.684	33.856	1.00	77.65	BBBB
ATOM	6262	C	GLU	B	320	-33.508	78.929	29.781	1.00	71.21	BBBB
ATOM	6263	O	GLU	B	320	-34.662	79.329	29.613	1.00	71.99	BBBB
ATOM	6264	N	PHE	B	321	-32.484	79.744	30.015	1.00	70.49	BBBB
ATOM	6265	CA	PHE	B	321	-32.658	81.187	30.113	1.00	68.90	BBBB
ATOM	6266	CB	PHE	B	321	-32.435	81.626	31.556	1.00	68.44	BBBB
ATOM	6267	CG	PHE	B	321	-33.258	80.865	32.555	1.00	67.69	BBBB
ATOM	6268	CD1	PHE	B	321	-32.670	80.345	33.704	1.00	68.15	BBBB
ATOM	6269	CD2	PHE	B	321	-34.619	80.676	32.356	1.00	67.72	BBBB
ATOM	6270	CE1	PHE	B	321	-33.427	79.646	34.643	1.00	67.20	BBBB
ATOM	6271	CE2	PHE	B	321	-35.388	79.977	33.290	1.00	67.76	BBBB
ATOM	6272	CZ	PHE	B	321	-34.788	79.462	34.435	1.00	67.36	BBBB
ATOM	6273	C	PHE	B	321	-31.684	81.912	29.189	1.00	68.22	BBBB
ATOM	6274	O	PHE	B	321	-31.500	83.122	29.291	1.00	66.59	BBBB
ATOM	6275	N	LYS	B	322	-31.073	81.155	28.285	1.00	68.90	BBBB
ATOM	6276	CA	LYS	B	322	-30.110	81.684	27.323	1.00	70.10	BBBB
ATOM	6277	CB	LYS	B	322	-29.626	80.559	26.403	1.00	73.25	BBBB
ATOM	6278	CG	LYS	B	322	-28.692	81.001	25.274	1.00	77.45	BBBB
ATOM	6279	CD	LYS	B	322	-28.246	79.811	24.412	1.00	79.77	BBBB
ATOM	6280	CE	LYS	B	322	-29.440	79.119	23.744	1.00	81.78	BBBB
ATOM	6281	NZ	LYS	B	322	-29.046	77.957	22.891	1.00	81.06	BBBB
ATOM	6282	C	LYS	B	322	-30.706	82.798	26.475	1.00	69.43	BBBB
ATOM	6283	O	LYS	B	322	-30.009	83.731	26.076	1.00	69.86	BBBB
ATOM	6284	N	ASP	B	323	-32.000	82.700	26.201	1.00	67.62	BBBB
ATOM	6285	CA	ASP	B	323	-32.661	83.699	25.386	1.00	65.49	BBBB
ATOM	6286	CB	ASP	B	323	-33.230	83.033	24.132	1.00	67.74	BBBB
ATOM	6287	CG	ASP	B	323	-32.165	82.797	23.067	1.00	70.63	BBBB
ATOM	6288	OD1	ASP	B	323	-31.701	83.806	22.476	1.00	71.54	BBBB
ATOM	6289	OD2	ASP	B	323	-31.786	81.619	22.828	1.00	69.84	BBBB
ATOM	6290	C	ASP	B	323	-33.741	84.477	26.124	1.00	62.95	BBBB
ATOM	6291	O	ASP	B	323	-34.727	84.912	25.534	1.00	63.68	BBBB
ATOM	6292	N	SER	B	324	-33.547	84.659	27.422	1.00	58.84	BBBB
ATOM	6293	CA	SER	B	324	-34.499	85.408	28.222	1.00	55.63	BBBB
ATOM	6294	CB	SER	B	324	-34.795	84.652	29.514	1.00	55.44	BBBB
ATOM	6295	OG	SER	B	324	-35.232	83.336	29.236	1.00	52.70	BBBB

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ATOM	6296	C	SER	B	324	-33.845	86.751	28.523	1.00	54.09	BBBB
ATOM	6297	O	SER	B	324	-32.691	86.792	28.928	1.00	55.19	BBBB
ATOM	6298	N	LEU	B	325	-34.563	87.849	28.322	1.00	51.47	BBBB
ATOM	6299	CA	LEU	B	325	-33.975	89.164	28.570	1.00	49.05	BBBB
ATOM	6300	CB	LEU	B	325	-34.643	90.228	27.694	1.00	47.40	BBBB
ATOM	6301	CG	LEU	B	325	-34.265	90.244	26.217	1.00	45.78	BBBB
ATOM	6302	CD1	LEU	B	325	-35.076	91.293	25.502	1.00	44.92	BBBB
ATOM	6303	CD2	LEU	B	325	-32.793	90.539	26.069	1.00	46.75	BBBB
ATOM	6304	C	LEU	B	325	-34.039	89.617	30.020	1.00	47.91	BBBB
ATOM	6305	O	LEU	B	325	-33.243	90.454	30.453	1.00	46.83	BBBB
ATOM	6306	N	SER	B	326	-34.978	89.059	30.771	1.00	46.46	BBBB
ATOM	6307	CA	SER	B	326	-35.142	89.460	32.155	1.00	46.06	BBBB
ATOM	6308	CB	SER	B	326	-35.831	90.834	32.195	1.00	43.30	BBBB
ATOM	6309	OG	SER	B	326	-36.329	91.133	33.487	1.00	42.62	BBBB
ATOM	6310	C	SER	B	326	-35.964	88.444	32.937	1.00	47.16	BBBB
ATOM	6311	O	SER	B	326	-36.556	87.540	32.365	1.00	46.72	BBBB
ATOM	6312	N	ILE	B	327	-35.971	88.584	34.254	1.00	48.02	BBBB
ATOM	6313	CA	ILE	B	327	-36.764	87.711	35.083	1.00	50.65	BBBB
ATOM	6314	CB	ILE	B	327	-36.442	87.919	36.585	1.00	49.79	BBBB
ATOM	6315	CG2	ILE	B	327	-37.621	87.528	37.442	1.00	49.71	BBBB
ATOM	6316	CG1	ILE	B	327	-35.225	87.079	36.972	1.00	50.62	BBBB
ATOM	6317	CD1	ILE	B	327	-34.804	87.233	38.419	0.01	50.48	BBBB
ATOM	6318	C	ILE	B	327	-38.172	88.181	34.769	1.00	53.13	BBBB
ATOM	6319	O	ILE	B	327	-38.432	89.377	34.758	1.00	54.35	BBBB
ATOM	6320	N	ASN	B	328	-39.070	87.248	34.476	1.00	56.23	BBBB
ATOM	6321	CA	ASN	B	328	-40.451	87.592	34.150	1.00	57.54	BBBB
ATOM	6322	CB	ASN	B	328	-40.602	87.769	32.634	1.00	55.73	BBBB
ATOM	6323	CG	ASN	B	328	-40.293	86.504	31.871	1.00	54.33	BBBB
ATOM	6324	OD1	ASN	B	328	-40.766	85.436	32.236	1.00	53.76	BBBB
ATOM	6325	ND2	ASN	B	328	-39.510	86.619	30.804	1.00	56.09	BBBB
ATOM	6326	C	ASN	B	328	-41.437	86.532	34.648	1.00	59.49	BBBB
ATOM	6327	O	ASN	B	328	-41.047	85.536	35.263	1.00	59.84	BBBB
ATOM	6328	N	ALA	B	329	-42.719	86.758	34.380	1.00	62.01	BBBB
ATOM	6329	CA	ALA	B	329	-43.775	85.838	34.796	1.00	63.43	BBBB
ATOM	6330	CB	ALA	B	329	-45.074	86.164	34.061	1.00	63.91	BBBB
ATOM	6331	C	ALA	B	329	-43.371	84.404	34.510	1.00	63.56	BBBB
ATOM	6332	O	ALA	B	329	-43.232	83.585	35.416	1.00	64.38	BBBB
ATOM	6333	N	THR	B	330	-43.182	84.113	33.233	1.00	63.44	BBBB
ATOM	6334	CA	THR	B	330	-42.790	82.788	32.799	1.00	64.49	BBBB
ATOM	6335	CB	THR	B	330	-42.465	82.823	31.305	1.00	63.43	BBBB
ATOM	6336	OG1	THR	B	330	-43.589	83.368	30.608	1.00	62.46	BBBB
ATOM	6337	CG2	THR	B	330	-42.168	81.433	30.774	1.00	62.87	BBBB
ATOM	6338	C	THR	B	330	-41.595	82.229	33.582	1.00	65.88	BBBB
ATOM	6339	O	THR	B	330	-41.586	81.056	33.941	1.00	65.41	BBBB
ATOM	6340	N	ASN	B	331	-40.605	83.084	33.850	1.00	68.25	BBBB
ATOM	6341	CA	ASN	B	331	-39.376	82.720	34.567	1.00	68.99	BBBB
ATOM	6342	CB	ASN	B	331	-38.353	83.844	34.455	1.00	68.69	BBBB
ATOM	6343	CG	ASN	B	331	-37.844	84.013	33.066	1.00	70.30	BBBB
ATOM	6344	OD1	ASN	B	331	-37.315	85.061	32.716	1.00	72.45	BBBB
ATOM	6345	ND2	ASN	B	331	-37.988	82.975	32.255	1.00	70.51	BBBB
ATOM	6346	C	ASN	B	331	-39.526	82.394	36.038	1.00	70.04	BBBB
ATOM	6347	O	ASN	B	331	-39.348	81.254	36.440	1.00	69.17	BBBB
ATOM	6348	N	ILE	B	332	-39.807	83.425	36.831	1.00	72.29	BBBB
ATOM	6349	CA	ILE	B	332	-39.972	83.312	38.281	1.00	74.96	BBBB
ATOM	6350	CB	ILE	B	332	-41.122	84.227	38.755	1.00	75.82	BBBB
ATOM	6351	CG2	ILE	B	332	-41.628	83.791	40.117	1.00	77.32	BBBB
ATOM	6352	CG1	ILE	B	332	-40.631	85.671	38.791	1.00	75.63	BBBB
ATOM	6353	CD1	ILE	B	332	-39.473	85.889	39.739	1.00	75.59	BBBB
ATOM	6354	C	ILE	B	332	-40.213	81.884	38.758	1.00	75.52	BBBB
ATOM	6355	O	ILE	B	332	-39.625	81.433	39.743	1.00	76.31	BBBB
ATOM	6356	N	LYS	B	333	-41.094	81.189	38.051	1.00	75.70	BBBB
ATOM	6357	CA	LYS	B	333	-41.429	79.800	38.331	1.00	74.42	BBBB
ATOM	6358	CB	LYS	B	333	-41.973	79.186	37.034	1.00	74.76	BBBB
ATOM	6359	CG	LYS	B	333	-42.341	77.711	37.044	1.00	74.79	BBBB
ATOM	6360	CD	LYS	B	333	-42.914	77.321	35.677	1.00	73.27	BBBB
ATOM	6361	CE	LYS	B	333	-41.933	77.655	34.553	1.00	73.00	BBBB
ATOM	6362	NZ	LYS	B	333	-42.501	77.500	33.186	1.00	72.02	BBBB
ATOM	6363	C	LYS	B	333	-40.205	79.020	38.830	1.00	73.34	BBBB
ATOM	6364	O	LYS	B	333	-40.314	78.182	39.716	1.00	73.79	BBBB
ATOM	6365	N	HIS	B	334	-39.039	79.337	38.279	1.00	72.05	BBBB
ATOM	6366	CA	HIS	B	334	-37.799	78.649	38.615	1.00	71.32	BBBB
ATOM	6367	CB	HIS	B	334	-36.996	78.413	37.331	1.00	73.14	BBBB
ATOM	6368	CG	HIS	B	334	-37.741	77.654	36.277	1.00	74.90	BBBB
ATOM	6369	CD2	HIS	B	334	-38.698	78.049	35.403	1.00	74.74	BBBB
ATOM	6370	ND1	HIS	B	334	-37.546	76.309	36.049	1.00	75.57	BBBB

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ATOM	6371	CE1	HIS	B	334	-38.351	75.908	35.081	1.00	76.00	BBBB
ATOM	6372	NE2	HIS	B	334	-39.061	76.944	34.672	1.00	75.62	BBBB
ATOM	6373	C	HIS	B	334	-36.874	79.311	39.632	1.00	70.54	BBBB
ATOM	6374	O	HIS	B	334	-35.777	78.810	39.871	1.00	71.01	BBBB
ATOM	6375	N	PHE	B	335	-37.281	80.415	40.241	1.00	69.54	BBBB
ATOM	6376	CA	PHE	B	335	-36.380	81.073	41.187	1.00	69.65	BBBB
ATOM	6377	CB	PHE	B	335	-36.107	82.516	40.738	1.00	67.18	BBBB
ATOM	6378	CG	PHE	B	335	-35.473	82.613	39.384	1.00	63.02	BBBB
ATOM	6379	CD1	PHE	B	335	-36.240	82.485	38.233	1.00	61.32	BBBB
ATOM	6380	CD2	PHE	B	335	-34.101	82.777	39.259	1.00	61.48	BBBB
ATOM	6381	CE1	PHE	B	335	-35.651	82.514	36.973	1.00	60.12	BBBB
ATOM	6382	CE2	PHE	B	335	-33.501	82.807	38.003	1.00	61.68	BBBB
ATOM	6383	CZ	PHE	B	335	-34.282	82.674	36.857	1.00	60.22	BBBB
ATOM	6384	C	PHE	B	335	-36.796	81.071	42.656	1.00	70.97	BBBB
ATOM	6385	O	PHE	B	335	-36.300	81.882	43.447	1.00	72.11	BBBB
ATOM	6386	N	LYS	B	336	-37.684	80.154	43.029	1.00	71.52	BBBB
ATOM	6387	CA	LYS	B	336	-38.141	80.076	44.411	1.00	71.65	BBBB
ATOM	6388	CB	LYS	B	336	-39.522	79.405	44.473	1.00	72.51	BBBB
ATOM	6389	CG	LYS	B	336	-40.445	79.952	45.570	1.00	74.09	BBBB
ATOM	6390	CD	LYS	B	336	-39.840	79.791	46.964	1.00	75.52	BBBB
ATOM	6391	CE	LYS	B	336	-40.657	80.516	48.024	1.00	75.95	BBBB
ATOM	6392	NZ	LYS	B	336	-40.000	80.486	49.365	1.00	76.46	BBBB
ATOM	6393	C	LYS	B	336	-37.131	79.304	45.268	1.00	70.97	BBBB
ATOM	6394	O	LYS	B	336	-36.532	78.333	44.810	1.00	70.63	BBBB
ATOM	6395	N	ASN	B	337	-36.941	79.758	46.505	1.00	71.06	BBBB
ATOM	6396	CA	ASN	B	337	-36.020	79.126	47.447	1.00	70.74	BBBB
ATOM	6397	CB	ASN	B	337	-36.512	77.725	47.824	1.00	73.65	BBBB
ATOM	6398	CG	ASN	B	337	-37.395	77.722	49.062	1.00	75.89	BBBB
ATOM	6399	OD1	ASN	B	337	-38.374	78.464	49.143	1.00	78.26	BBBB
ATOM	6400	ND2	ASN	B	337	-37.053	76.876	50.032	1.00	76.63	BBBB
ATOM	6401	C	ASN	B	337	-34.579	79.027	46.969	1.00	69.04	BBBB
ATOM	6402	O	ASN	B	337	-33.809	78.228	47.496	1.00	69.63	BBBB
ATOM	6403	N	CYS	B	338	-34.207	79.818	45.970	1.00	67.23	BBBB
ATOM	6404	CA	CYS	B	338	-32.831	79.783	45.494	1.00	64.97	BBBB
ATOM	6405	C	CYS	B	338	-31.959	80.370	46.593	1.00	63.49	BBBB
ATOM	6406	O	CYS	B	338	-32.382	81.267	47.318	1.00	63.64	BBBB
ATOM	6407	CB	CYS	B	338	-32.680	80.592	44.208	1.00	65.09	BBBB
ATOM	6408	SG	CYS	B	338	-33.662	79.937	42.823	1.00	65.86	BBBB
ATOM	6409	N	THR	B	339	-30.747	79.852	46.725	1.00	61.37	BBBB
ATOM	6410	CA	THR	B	339	-29.827	80.315	47.753	1.00	59.44	BBBB
ATOM	6411	CB	THR	B	339	-29.361	79.129	48.610	1.00	60.39	BBBB
ATOM	6412	OG1	THR	B	339	-30.490	78.604	49.322	1.00	62.68	BBBB
ATOM	6413	CG2	THR	B	339	-28.278	79.552	49.599	1.00	60.13	BBBB
ATOM	6414	C	THR	B	339	-28.632	80.982	47.109	1.00	57.10	BBBB
ATOM	6415	O	THR	B	339	-27.916	81.771	47.732	1.00	55.60	BBBB
ATOM	6416	N	SER	B	340	-28.433	80.655	45.840	1.00	55.47	BBBB
ATOM	6417	CA	SER	B	340	-27.335	81.198	45.067	1.00	52.65	BBBB
ATOM	6418	CB	SER	B	340	-26.119	80.282	45.195	1.00	52.72	BBBB
ATOM	6419	OG	SER	B	340	-25.039	80.758	44.419	1.00	53.47	BBBB
ATOM	6420	C	SER	B	340	-27.756	81.281	43.611	1.00	51.70	BBBB
ATOM	6421	O	SER	B	340	-28.515	80.432	43.129	1.00	52.16	BBBB
ATOM	6422	N	ILE	B	341	-27.290	82.310	42.913	1.00	48.37	BBBB
ATOM	6423	CA	ILE	B	341	-27.595	82.428	41.499	1.00	46.41	BBBB
ATOM	6424	CB	ILE	B	341	-28.124	83.829	41.115	1.00	44.81	BBBB
ATOM	6425	CG2	ILE	B	341	-28.282	83.929	39.607	1.00	43.61	BBBB
ATOM	6426	CG1	ILE	B	341	-29.466	84.095	41.801	1.00	44.09	BBBB
ATOM	6427	CD1	ILE	B	341	-30.562	83.124	41.457	1.00	42.13	BBBB
ATOM	6428	C	ILE	B	341	-26.292	82.163	40.758	1.00	46.70	BBBB
ATOM	6429	O	ILE	B	341	-25.331	82.921	40.887	1.00	44.95	BBBB
ATOM	6430	N	SER	B	342	-26.256	81.065	40.006	1.00	47.12	BBBB
ATOM	6431	CA	SER	B	342	-25.067	80.716	39.245	1.00	47.33	BBBB
ATOM	6432	CB	SER	B	342	-24.948	79.198	39.046	1.00	46.09	BBBB
ATOM	6433	OG	SER	B	342	-23.688	78.872	38.478	1.00	42.37	BBBB
ATOM	6434	C	SER	B	342	-25.272	81.384	37.919	1.00	47.98	BBBB
ATOM	6435	O	SER	B	342	-26.023	80.894	37.079	1.00	49.60	BBBB
ATOM	6436	N	GLY	B	343	-24.617	82.517	37.731	1.00	48.46	BBBB
ATOM	6437	CA	GLY	B	343	-24.784	83.234	36.483	1.00	46.97	BBBB
ATOM	6438	C	GLY	B	343	-25.197	84.666	36.745	1.00	45.82	BBBB
ATOM	6439	O	GLY	B	343	-24.599	85.328	37.595	1.00	46.58	BBBB
ATOM	6440	N	ASP	B	344	-26.230	85.143	36.055	1.00	43.09	BBBB
ATOM	6441	CA	ASP	B	344	-26.639	86.529	36.228	1.00	40.82	BBBB
ATOM	6442	CB	ASP	B	344	-26.204	87.322	35.003	1.00	41.30	BBBB
ATOM	6443	CG	ASP	B	344	-24.790	86.989	34.571	1.00	42.04	BBBB
ATOM	6444	OD1	ASP	B	344	-24.578	86.677	33.383	1.00	45.28	BBBB
ATOM	6445	OD2	ASP	B	344	-23.883	87.040	35.417	1.00	41.93	BBBB

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ATOM	6446	C	ASP	B	344	-28.119	86.766	36.471	1.00	39.81	BBBB
ATOM	6447	O	ASP	B	344	-28.953	85.922	36.186	1.00	41.14	BBBB
ATOM	6448	N	LEU	B	345	-28.435	87.930	37.020	1.00	38.89	BBBB
ATOM	6449	CA	LEU	B	345	-29.818	88.314	37.252	1.00	37.49	BBBB
ATOM	6450	CB	LEU	B	345	-30.067	88.604	38.727	1.00	36.92	BBBB
ATOM	6451	CG	LEU	B	345	-30.288	87.396	39.616	1.00	37.97	BBBB
ATOM	6452	CD1	LEU	B	345	-30.541	87.856	41.033	1.00	39.49	BBBB
ATOM	6453	CD2	LEU	B	345	-31.476	86.599	39.103	1.00	40.67	BBBB
ATOM	6454	C	LEU	B	345	-30.048	89.586	36.448	1.00	37.47	BBBB
ATOM	6455	O	LEU	B	345	-29.285	90.541	36.570	1.00	37.68	BBBB
ATOM	6456	N	HIS	B	346	-31.079	89.582	35.611	1.00	37.72	BBBB
ATOM	6457	CA	HIS	B	346	-31.429	90.746	34.801	1.00	37.67	BBBB
ATOM	6458	CB	HIS	B	346	-31.434	90.429	33.307	1.00	36.92	BBBB
ATOM	6459	CG	HIS	B	346	-30.110	90.046	32.735	1.00	37.35	BBBB
ATOM	6460	CD2	HIS	B	346	-29.166	89.180	33.164	1.00	35.34	BBBB
ATOM	6461	ND1	HIS	B	346	-29.673	90.519	31.512	1.00	36.70	BBBB
ATOM	6462	CE1	HIS	B	346	-28.517	89.958	31.214	1.00	32.70	BBBB
ATOM	6463	NE2	HIS	B	346	-28.188	89.141	32.200	1.00	37.32	BBBB
ATOM	6464	C	HIS	B	346	-32.852	91.169	35.138	1.00	37.84	BBBB
ATOM	6465	O	HIS	B	346	-33.773	90.367	35.034	1.00	36.38	BBBB
ATOM	6466	N	ILE	B	347	-33.044	92.419	35.536	1.00	37.99	BBBB
ATOM	6467	CA	ILE	B	347	-34.391	92.893	35.812	1.00	38.63	BBBB
ATOM	6468	CB	ILE	B	347	-34.563	93.388	37.265	1.00	39.62	BBBB
ATOM	6469	CG2	ILE	B	347	-36.053	93.566	37.567	1.00	38.72	BBBB
ATOM	6470	CG1	ILE	B	347	-33.943	92.402	38.257	1.00	37.69	BBBB
ATOM	6471	CD1	ILE	B	347	-34.788	91.219	38.557	1.00	37.71	BBBB
ATOM	6472	C	ILE	B	347	-34.603	94.086	34.887	1.00	39.40	BBBB
ATOM	6473	O	ILE	B	347	-34.034	95.148	35.115	1.00	38.62	BBBB
ATOM	6474	N	LEU	B	348	-35.399	93.919	33.837	1.00	41.41	BBBB
ATOM	6475	CA	LEU	B	348	-35.651	95.035	32.923	1.00	43.56	BBBB
ATOM	6476	CB	LEU	B	348	-35.387	94.630	31.474	1.00	40.60	BBBB
ATOM	6477	CG	LEU	B	348	-34.055	93.968	31.150	1.00	38.94	BBBB
ATOM	6478	CD1	LEU	B	348	-33.827	94.053	29.668	1.00	35.54	BBBB
ATOM	6479	CD2	LEU	B	348	-32.938	94.643	31.889	1.00	40.21	BBBB
ATOM	6480	C	LEU	B	348	-37.088	95.524	33.045	1.00	45.21	BBBB
ATOM	6481	O	LEU	B	348	-37.908	94.880	33.690	1.00	46.03	BBBB
ATOM	6482	N	PRO	B	349	-37.401	96.689	32.451	1.00	46.16	BBBB
ATOM	6483	CD	PRO	B	349	-36.475	97.653	31.829	1.00	46.64	BBBB
ATOM	6484	CA	PRO	B	349	-38.757	97.236	32.507	1.00	46.98	BBBB
ATOM	6485	CB	PRO	B	349	-38.654	98.481	31.641	1.00	45.66	BBBB
ATOM	6486	CG	PRO	B	349	-37.257	98.936	31.877	1.00	45.66	BBBB
ATOM	6487	C	PRO	B	349	-39.732	96.219	31.926	1.00	49.72	BBBB
ATOM	6488	O	PRO	B	349	-40.873	96.094	32.364	1.00	49.86	BBBB
ATOM	6489	N	VAL	B	350	-39.250	95.479	30.940	1.00	52.51	BBBB
ATOM	6490	CA	VAL	B	350	-40.044	94.469	30.265	1.00	56.07	BBBB
ATOM	6491	CB	VAL	B	350	-39.166	93.685	29.275	1.00	58.54	BBBB
ATOM	6492	CG1	VAL	B	350	-40.041	92.967	28.242	1.00	57.79	BBBB
ATOM	6493	CG2	VAL	B	350	-38.164	94.647	28.609	1.00	58.65	BBBB
ATOM	6494	C	VAL	B	350	-40.675	93.494	31.249	1.00	57.28	BBBB
ATOM	6495	O	VAL	B	350	-41.759	92.965	31.011	1.00	58.21	BBBB
ATOM	6496	N	ALA	B	351	-39.999	93.258	32.360	1.00	57.61	BBBB
ATOM	6497	CA	ALA	B	351	-40.516	92.333	33.349	1.00	59.85	BBBB
ATOM	6498	CB	ALA	B	351	-39.651	92.365	34.593	1.00	57.77	BBBB
ATOM	6499	C	ALA	B	351	-41.962	92.638	33.718	1.00	62.52	BBBB
ATOM	6500	O	ALA	B	351	-42.878	91.895	33.346	1.00	62.99	BBBB
ATOM	6501	N	PHE	B	352	-42.146	93.743	34.440	1.00	64.49	BBBB
ATOM	6502	CA	PHE	B	352	-43.448	94.193	34.936	1.00	65.64	BBBB
ATOM	6503	CB	PHE	B	352	-43.239	95.354	35.911	1.00	65.23	BBBB
ATOM	6504	CG	PHE	B	352	-42.092	95.158	36.862	1.00	64.95	BBBB
ATOM	6505	CD1	PHE	B	352	-40.961	95.966	36.781	1.00	65.73	BBBB
ATOM	6506	CD2	PHE	B	352	-42.145	94.186	37.853	1.00	65.57	BBBB
ATOM	6507	CE1	PHE	B	352	-39.899	95.810	37.676	1.00	65.39	BBBB
ATOM	6508	CE2	PHE	B	352	-41.085	94.022	38.755	1.00	65.60	BBBB
ATOM	6509	CZ	PHE	B	352	-39.962	94.837	38.664	1.00	64.57	BBBB
ATOM	6510	C	PHE	B	352	-44.478	94.614	33.878	1.00	66.84	BBBB
ATOM	6511	O	PHE	B	352	-45.683	94.446	34.065	1.00	66.54	BBBB
ATOM	6512	N	ARG	B	353	-44.000	95.177	32.779	1.00	68.46	BBBB
ATOM	6513	CA	ARG	B	353	-44.870	95.632	31.706	1.00	70.48	BBBB
ATOM	6514	CB	ARG	B	353	-44.106	96.631	30.830	1.00	72.39	BBBB
ATOM	6515	CG	ARG	B	353	-44.833	97.163	29.599	1.00	73.98	BBBB
ATOM	6516	CD	ARG	B	353	-43.823	97.864	28.692	1.00	76.48	BBBB
ATOM	6517	NE	ARG	B	353	-42.956	98.755	29.464	1.00	78.86	BBBB
ATOM	6518	CZ	ARG	B	353	-41.774	99.213	29.053	1.00	79.62	BBBB
ATOM	6519	NH1	ARG	B	353	-41.297	98.867	27.863	1.00	79.42	BBBB
ATOM	6520	NH2	ARG	B	353	-41.065	100.022	29.839	1.00	78.85	BBBB

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ATOM	6521	C	ARG	B	353	-45.356	94.460	30.861	1.00	71.10	BBBB
ATOM	6522	O	ARG	B	353	-46.522	94.404	30.479	1.00	72.29	BBBB
ATOM	6523	N	GLY	B	354	-44.459	93.526	30.569	1.00	71.17	BBBB
ATOM	6524	CA	GLY	B	354	-44.827	92.383	29.755	1.00	71.01	BBBB
ATOM	6525	C	GLY	B	354	-44.459	92.594	28.297	1.00	71.35	BBBB
ATOM	6526	O	GLY	B	354	-44.590	93.698	27.767	1.00	72.45	BBBB
ATOM	6527	N	ASP	B	355	-43.993	91.539	27.642	1.00	71.22	BBBB
ATOM	6528	CA	ASP	B	355	-43.607	91.636	26.242	1.00	71.80	BBBB
ATOM	6529	CB	ASP	B	355	-42.170	91.139	26.050	1.00	71.41	BBBB
ATOM	6530	CG	ASP	B	355	-41.627	91.437	24.665	1.00	71.30	BBBB
ATOM	6531	OD1	ASP	B	355	-41.852	92.562	24.171	1.00	71.37	BBBB
ATOM	6532	OD2	ASP	B	355	-40.962	90.558	24.077	1.00	70.73	BBBB
ATOM	6533	C	ASP	B	355	-44.561	90.795	25.425	1.00	72.88	BBBB
ATOM	6534	O	ASP	B	355	-44.912	89.685	25.818	1.00	72.62	BBBB
ATOM	6535	N	SER	B	356	-44.989	91.325	24.288	1.00	74.27	BBBB
ATOM	6536	CA	SER	B	356	-45.915	90.598	23.436	1.00	75.18	BBBB
ATOM	6537	CB	SER	B	356	-46.923	91.559	22.809	1.00	76.41	BBBB
ATOM	6538	OG	SER	B	356	-47.651	92.245	23.814	1.00	76.96	BBBB
ATOM	6539	C	SER	B	356	-45.179	89.852	22.345	1.00	75.07	BBBB
ATOM	6540	O	SER	B	356	-45.703	88.901	21.774	1.00	75.98	BBBB
ATOM	6541	N	PHE	B	357	-43.960	90.280	22.052	1.00	74.54	BBBB
ATOM	6542	CA	PHE	B	357	-43.194	89.620	21.012	1.00	74.60	BBBB
ATOM	6543	CB	PHE	B	357	-41.962	90.440	20.648	1.00	74.47	BBBB
ATOM	6544	CG	PHE	B	357	-41.234	89.919	19.450	1.00	75.82	BBBB
ATOM	6545	CD1	PHE	B	357	-41.823	89.967	18.193	1.00	76.15	BBBB
ATOM	6546	CD2	PHE	B	357	-39.968	89.359	19.576	1.00	76.65	BBBB
ATOM	6547	CE1	PHE	B	357	-41.158	89.463	17.073	1.00	77.05	BBBB
ATOM	6548	CE2	PHE	B	357	-39.293	88.851	18.460	1.00	76.83	BBBB
ATOM	6549	CZ	PHE	B	357	-39.889	88.903	17.209	1.00	76.17	BBBB
ATOM	6550	C	PHE	B	357	-42.769	88.227	21.460	1.00	74.37	BBBB
ATOM	6551	O	PHE	B	357	-42.473	87.364	20.634	1.00	74.95	BBBB
ATOM	6552	N	THR	B	358	-42.737	88.009	22.769	1.00	73.05	BBBB
ATOM	6553	CA	THR	B	358	-42.344	86.714	23.297	1.00	71.85	BBBB
ATOM	6554	CB	THR	B	358	-41.027	86.808	24.075	1.00	71.47	BBBB
ATOM	6555	OG1	THR	B	358	-41.195	87.689	25.191	1.00	72.16	BBBB
ATOM	6556	CG2	THR	B	358	-39.916	87.329	23.174	1.00	69.25	BBBB
ATOM	6557	C	THR	B	358	-43.430	86.188	24.215	1.00	72.42	BBBB
ATOM	6558	O	THR	B	358	-43.167	85.416	25.137	1.00	73.02	BBBB
ATOM	6559	N	HIS	B	359	-44.654	86.628	23.950	1.00	71.96	BBBB
ATOM	6560	CA	HIS	B	359	-45.828	86.220	24.709	1.00	72.06	BBBB
ATOM	6561	CB	HIS	B	359	-46.379	84.911	24.135	1.00	72.11	BBBB
ATOM	6562	CG	HIS	B	359	-46.495	84.907	22.637	1.00	72.57	BBBB
ATOM	6563	CD2	HIS	B	359	-47.468	85.370	21.814	1.00	71.73	BBBB
ATOM	6564	ND1	HIS	B	359	-45.513	84.393	21.814	1.00	71.52	BBBB
ATOM	6565	CE1	HIS	B	359	-45.877	84.538	20.551	1.00	70.99	BBBB
ATOM	6566	NE2	HIS	B	359	-47.059	85.129	20.524	1.00	70.90	BBBB
ATOM	6567	C	HIS	B	359	-45.543	86.063	26.202	1.00	72.48	BBBB
ATOM	6568	O	HIS	B	359	-45.907	85.059	26.809	1.00	73.32	BBBB
ATOM	6569	N	THR	B	360	-44.903	87.069	26.788	1.00	72.39	BBBB
ATOM	6570	CA	THR	B	360	-44.559	87.044	28.203	1.00	72.95	BBBB
ATOM	6571	CB	THR	B	360	-43.116	87.540	28.436	1.00	72.89	BBBB
ATOM	6572	OG1	THR	B	360	-42.203	86.722	27.696	1.00	72.57	BBBB
ATOM	6573	CG2	THR	B	360	-42.762	87.486	29.917	1.00	71.39	BBBB
ATOM	6574	C	THR	B	360	-45.496	87.901	29.043	1.00	73.52	BBBB
ATOM	6575	O	THR	B	360	-45.364	89.122	29.099	1.00	73.76	BBBB
ATOM	6576	N	PRO	B	361	-46.448	87.263	29.727	1.00	73.90	BBBB
ATOM	6577	CD	PRO	B	361	-46.605	85.802	29.802	1.00	73.55	BBBB
ATOM	6578	CA	PRO	B	361	-47.425	87.943	30.582	1.00	74.77	BBBB
ATOM	6579	CB	PRO	B	361	-48.066	86.795	31.342	1.00	74.38	BBBB
ATOM	6580	CG	PRO	B	361	-47.987	85.663	30.366	1.00	74.87	BBBB
ATOM	6581	C	PRO	B	361	-46.759	88.926	31.535	1.00	75.61	BBBB
ATOM	6582	O	PRO	B	361	-45.588	88.780	31.863	1.00	75.65	BBBB
ATOM	6583	N	PRO	B	362	-47.499	89.949	31.985	1.00	77.07	BBBB
ATOM	6584	CD	PRO	B	362	-48.844	90.368	31.558	1.00	78.27	BBBB
ATOM	6585	CA	PRO	B	362	-46.927	90.926	32.912	1.00	77.74	BBBB
ATOM	6586	CB	PRO	B	362	-48.112	91.813	33.252	1.00	76.80	BBBB
ATOM	6587	CG	PRO	B	362	-48.872	91.825	31.979	1.00	78.02	BBBB
ATOM	6588	C	PRO	B	362	-46.428	90.165	34.118	1.00	79.03	BBBB
ATOM	6589	O	PRO	B	362	-46.618	88.954	34.204	1.00	79.95	BBBB
ATOM	6590	N	LEU	B	363	-45.803	90.869	35.051	1.00	79.98	BBBB
ATOM	6591	CA	LEU	B	363	-45.268	90.233	36.243	1.00	81.06	BBBB
ATOM	6592	CB	LEU	B	363	-43.747	90.403	36.282	1.00	81.12	BBBB
ATOM	6593	CG	LEU	B	363	-42.999	89.928	37.528	1.00	80.63	BBBB
ATOM	6594	CD1	LEU	B	363	-43.116	88.423	37.672	1.00	80.83	BBBB
ATOM	6595	CD2	LEU	B	363	-41.543	90.331	37.415	1.00	80.32	BBBB

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ATOM	6596	C	LEU B 363	-45.882	90.846	37.483	1.00	82.19	BBBB
ATOM	6597	O	LEU B 363	-46.203	92.030	37.502	1.00	83.41	BBBB
ATOM	6598	N	ASP B 364	-46.050	90.037	38.519	1.00	83.55	BBBB
ATOM	6599	CA	ASP B 364	-46.617	90.528	39.764	1.00	84.60	BBBB
ATOM	6600	CB	ASP B 364	-47.372	89.411	40.489	1.00	85.44	BBBB
ATOM	6601	CG	ASP B 364	-48.242	89.935	41.617	1.00	86.10	BBBB
ATOM	6602	OD1	ASP B 364	-49.197	90.680	41.322	1.00	87.19	BBBB
ATOM	6603	OD2	ASP B 364	-47.976	89.610	42.795	1.00	86.13	BBBB
ATOM	6604	C	ASP B 364	-45.463	91.016	40.627	1.00	85.05	BBBB
ATOM	6605	O	ASP B 364	-44.800	90.225	41.296	1.00	85.63	BBBB
ATOM	6606	N	PRO B 365	-45.205	92.332	40.620	1.00	85.17	BBBB
ATOM	6607	CD	PRO B 365	-46.013	93.373	39.962	1.00	85.04	BBBB
ATOM	6608	CA	PRO B 365	-44.123	92.938	41.401	1.00	84.74	BBBB
ATOM	6609	CB	PRO B 365	-44.581	94.382	41.530	1.00	84.81	BBBB
ATOM	6610	CG	PRO B 365	-45.175	94.623	40.178	1.00	85.52	BBBB
ATOM	6611	C	PRO B 365	-43.846	92.281	42.752	1.00	83.78	BBBB
ATOM	6612	O	PRO B 365	-42.689	92.106	43.131	1.00	83.90	BBBB
ATOM	6613	N	GLN B 366	-44.905	91.914	43.468	1.00	82.56	BBBB
ATOM	6614	CA	GLN B 366	-44.764	91.280	44.778	1.00	81.82	BBBB
ATOM	6615	CB	GLN B 366	-46.148	90.956	45.354	1.00	81.66	BBBB
ATOM	6616	CG	GLN B 366	-46.681	91.978	46.344	0.01	82.94	BBBB
ATOM	6617	CD	GLN B 366	-45.930	91.954	47.660	0.01	83.37	BBBB
ATOM	6618	OE1	GLN B 366	-45.825	90.913	48.310	0.01	83.75	BBBB
ATOM	6619	NE2	GLN B 366	-45.406	93.105	48.064	0.01	83.73	BBBB
ATOM	6620	C	GLN B 366	-43.915	90.005	44.746	1.00	80.95	BBBB
ATOM	6621	O	GLN B 366	-43.226	89.687	45.720	1.00	80.86	BBBB
ATOM	6622	N	GLU B 367	-43.962	89.291	43.623	1.00	78.78	BBBB
ATOM	6623	CA	GLU B 367	-43.234	88.038	43.454	1.00	76.74	BBBB
ATOM	6624	CB	GLU B 367	-43.643	87.380	42.142	1.00	78.24	BBBB
ATOM	6625	CG	GLU B 367	-44.939	86.607	42.227	1.00	81.24	BBBB
ATOM	6626	CD	GLU B 367	-45.306	85.963	40.910	1.00	83.42	BBBB
ATOM	6627	OE1	GLU B 367	-45.836	86.669	40.021	1.00	84.43	BBBB
ATOM	6628	OE2	GLU B 367	-45.048	84.749	40.760	1.00	84.59	BBBB
ATOM	6629	C	GLU B 367	-41.713	88.089	43.524	1.00	74.99	BBBB
ATOM	6630	O	GLU B 367	-41.072	87.084	43.840	1.00	74.19	BBBB
ATOM	6631	N	LEU B 368	-41.126	89.242	43.224	1.00	72.65	BBBB
ATOM	6632	CA	LEU B 368	-39.677	89.354	43.269	1.00	70.20	BBBB
ATOM	6633	CB	LEU B 368	-39.220	90.729	42.780	1.00	68.68	BBBB
ATOM	6634	CG	LEU B 368	-39.114	90.923	41.267	1.00	68.10	BBBB
ATOM	6635	CD1	LEU B 368	-38.431	92.245	40.978	1.00	68.41	BBBB
ATOM	6636	CD2	LEU B 368	-38.317	89.790	40.647	1.00	67.31	BBBB
ATOM	6637	C	LEU B 368	-39.109	89.098	44.658	1.00	69.69	BBBB
ATOM	6638	O	LEU B 368	-37.902	88.937	44.815	1.00	70.52	BBBB
ATOM	6639	N	ASP B 369	-39.970	89.047	45.667	1.00	68.60	BBBB
ATOM	6640	CA	ASP B 369	-39.504	88.824	47.028	1.00	67.47	BBBB
ATOM	6641	CB	ASP B 369	-40.575	89.252	48.026	1.00	70.43	BBBB
ATOM	6642	CG	ASP B 369	-40.708	90.757	48.116	1.00	72.86	BBBB
ATOM	6643	OD1	ASP B 369	-39.914	91.380	48.860	1.00	73.78	BBBB
ATOM	6644	OD2	ASP B 369	-41.593	91.313	47.428	1.00	73.69	BBBB
ATOM	6645	C	ASP B 369	-39.091	87.394	47.302	1.00	65.62	BBBB
ATOM	6646	O	ASP B 369	-38.666	87.075	48.409	1.00	65.86	BBBB
ATOM	6647	N	ILE B 370	-39.222	86.532	46.301	1.00	63.55	BBBB
ATOM	6648	CA	ILE B 370	-38.833	85.137	46.465	1.00	61.49	BBBB
ATOM	6649	CB	ILE B 370	-39.453	84.227	45.384	1.00	61.61	BBBB
ATOM	6650	CG2	ILE B 370	-40.967	84.362	45.400	1.00	63.52	BBBB
ATOM	6651	CG1	ILE B 370	-38.917	84.602	44.005	1.00	61.59	BBBB
ATOM	6652	CD1	ILE B 370	-39.303	83.622	42.925	1.00	60.11	BBBB
ATOM	6653	C	ILE B 370	-37.324	85.066	46.349	1.00	59.95	BBBB
ATOM	6654	O	ILE B 370	-36.698	84.089	46.747	1.00	60.10	BBBB
ATOM	6655	N	LEU B 371	-36.750	86.123	45.791	1.00	58.52	BBBB
ATOM	6656	CA	LEU B 371	-35.313	86.218	45.610	1.00	55.37	BBBB
ATOM	6657	CB	LEU B 371	-34.993	87.299	44.584	1.00	54.84	BBBB
ATOM	6658	CG	LEU B 371	-35.384	86.999	43.139	1.00	52.80	BBBB
ATOM	6659	CD1	LEU B 371	-35.222	88.254	42.284	1.00	52.53	BBBB
ATOM	6660	CD2	LEU B 371	-34.517	85.881	42.614	1.00	50.84	BBBB
ATOM	6661	C	LEU B 371	-34.676	86.567	46.936	1.00	53.36	BBBB
ATOM	6662	O	LEU B 371	-33.462	86.535	47.083	1.00	50.47	BBBB
ATOM	6663	N	LYS B 372	-35.516	86.895	47.906	1.00	54.16	BBBB
ATOM	6664	CA	LYS B 372	-35.041	87.270	49.233	1.00	55.59	BBBB
ATOM	6665	CB	LYS B 372	-36.227	87.484	50.167	1.00	54.68	BBBB
ATOM	6666	CG	LYS B 372	-35.914	88.386	51.330	1.00	57.77	BBBB
ATOM	6667	CD	LYS B 372	-36.204	89.824	50.972	1.00	60.93	BBBB
ATOM	6668	CE	LYS B 372	-37.704	90.048	50.835	1.00	62.27	BBBB
ATOM	6669	NZ	LYS B 372	-38.402	89.697	52.099	1.00	63.40	BBBB
ATOM	6670	C	LYS B 372	-34.109	86.206	49.830	1.00	55.27	BBBB

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ATOM	6671	O	LYS	B	372	-33.309	86.484	50.723	1.00	54.59	BBBB
ATOM	6672	N	THR	B	373	-34.207	84.988	49.323	1.00	55.06	BBBB
ATOM	6673	CA	THR	B	373	-33.389	83.905	49.833	1.00	54.96	BBBB
ATOM	6674	CB	THR	B	373	-34.134	82.574	49.686	1.00	55.97	BBBB
ATOM	6675	OG1	THR	B	373	-33.229	81.495	49.936	1.00	62.53	BBBB
ATOM	6676	CG2	THR	B	373	-34.716	82.442	48.299	1.00	55.92	BBBB
ATOM	6677	C	THR	B	373	-32.007	83.807	49.179	1.00	53.43	BBBB
ATOM	6678	O	THR	B	373	-31.152	83.052	49.642	1.00	53.17	BBBB
ATOM	6679	N	VAL	B	374	-31.787	84.590	48.124	1.00	51.45	BBBB
ATOM	6680	CA	VAL	B	374	-30.518	84.595	47.407	1.00	48.64	BBBB
ATOM	6681	CB	VAL	B	374	-30.667	85.236	46.017	1.00	47.47	BBBB
ATOM	6682	CG1	VAL	B	374	-29.332	85.206	45.282	1.00	45.33	BBBB
ATOM	6683	CG2	VAL	B	374	-31.739	84.517	45.228	1.00	45.40	BBBB
ATOM	6684	C	VAL	B	374	-29.440	85.365	48.158	1.00	49.63	BBBB
ATOM	6685	O	VAL	B	374	-29.594	86.553	48.415	1.00	49.58	BBBB
ATOM	6686	N	LYS	B	375	-28.343	84.685	48.488	1.00	50.20	BBBB
ATOM	6687	CA	LYS	B	375	-27.234	85.297	49.213	1.00	50.22	BBBB
ATOM	6688	CB	LYS	B	375	-26.820	84.425	50.396	1.00	51.97	BBBB
ATOM	6689	CG	LYS	B	375	-27.853	84.305	51.480	1.00	54.96	BBBB
ATOM	6690	CD	LYS	B	375	-27.419	83.273	52.499	1.00	59.62	BBBB
ATOM	6691	CE	LYS	B	375	-28.167	83.449	53.804	1.00	62.95	BBBB
ATOM	6692	NZ	LYS	B	375	-27.880	84.800	54.377	1.00	65.62	BBBB
ATOM	6693	C	LYS	B	375	-26.037	85.457	48.305	1.00	49.83	BBBB
ATOM	6694	O	LYS	B	375	-25.112	86.215	48.606	1.00	48.44	BBBB
ATOM	6695	N	GLU	B	376	-26.052	84.732	47.193	1.00	50.21	BBBB
ATOM	6696	CA	GLU	B	376	-24.942	84.791	46.254	1.00	51.14	BBBB
ATOM	6697	CB	GLU	B	376	-24.020	83.594	46.474	1.00	55.61	BBBB
ATOM	6698	CG	GLU	B	376	-22.902	83.459	45.451	1.00	60.50	BBBB
ATOM	6699	CD	GLU	B	376	-22.300	82.064	45.444	1.00	65.37	BBBB
ATOM	6700	OE1	GLU	B	376	-21.301	81.842	44.716	1.00	66.83	BBBB
ATOM	6701	OE2	GLU	B	376	-22.838	81.188	46.166	1.00	67.46	BBBB
ATOM	6702	C	GLU	B	376	-25.325	84.841	44.783	1.00	49.06	BBBB
ATOM	6703	O	GLU	B	376	-26.266	84.183	44.341	1.00	47.80	BBBB
ATOM	6704	N	ILE	B	377	-24.560	85.632	44.040	1.00	47.93	BBBB
ATOM	6705	CA	ILE	B	377	-24.727	85.791	42.606	1.00	45.52	BBBB
ATOM	6706	CB	ILE	B	377	-25.285	87.192	42.244	1.00	45.16	BBBB
ATOM	6707	CG2	ILE	B	377	-25.300	87.371	40.725	1.00	45.48	BBBB
ATOM	6708	CG1	ILE	B	377	-26.709	87.347	42.781	1.00	42.80	BBBB
ATOM	6709	CD1	ILE	B	377	-27.348	88.659	42.402	1.00	40.17	BBBB
ATOM	6710	C	ILE	B	377	-23.351	85.607	41.979	1.00	44.14	BBBB
ATOM	6711	O	ILE	B	377	-22.461	86.446	42.140	1.00	43.23	BBBB
ATOM	6712	N	THR	B	378	-23.192	84.490	41.279	1.00	44.98	BBBB
ATOM	6713	CA	THR	B	378	-21.943	84.117	40.618	1.00	46.49	BBBB
ATOM	6714	CB	THR	B	378	-22.095	82.772	39.891	1.00	48.76	BBBB
ATOM	6715	OG1	THR	B	378	-22.284	81.729	40.856	1.00	51.00	BBBB
ATOM	6716	CG2	THR	B	378	-20.856	82.472	39.061	1.00	51.82	BBBB
ATOM	6717	C	THR	B	378	-21.450	85.140	39.614	1.00	46.16	BBBB
ATOM	6718	O	THR	B	378	-20.265	85.465	39.579	1.00	46.58	BBBB
ATOM	6719	N	GLY	B	379	-22.361	85.633	38.783	1.00	46.65	BBBB
ATOM	6720	CA	GLY	B	379	-21.989	86.628	37.792	1.00	45.78	BBBB
ATOM	6721	C	GLY	B	379	-22.309	88.051	38.221	1.00	44.57	BBBB
ATOM	6722	O	GLY	B	379	-21.880	88.517	39.286	1.00	44.55	BBBB
ATOM	6723	N	PHE	B	380	-23.077	88.748	37.389	1.00	42.91	BBBB
ATOM	6724	CA	PHE	B	380	-23.446	90.125	37.676	1.00	40.19	BBBB
ATOM	6725	CB	PHE	B	380	-23.024	91.023	36.515	1.00	39.56	BBBB
ATOM	6726	CG	PHE	B	380	-23.781	90.771	35.234	1.00	40.45	BBBB
ATOM	6727	CD1	PHE	B	380	-25.090	91.215	35.078	1.00	39.81	BBBB
ATOM	6728	CD2	PHE	B	380	-23.158	90.148	34.154	1.00	40.54	BBBB
ATOM	6729	CE1	PHE	B	380	-25.760	91.053	33.868	1.00	38.42	BBBB
ATOM	6730	CE2	PHE	B	380	-23.820	89.984	32.951	1.00	39.01	BBBB
ATOM	6731	CZ	PHE	B	380	-25.122	90.441	32.807	1.00	37.85	BBBB
ATOM	6732	C	PHE	B	380	-24.928	90.328	37.948	1.00	38.50	BBBB
ATOM	6733	O	PHE	B	380	-25.762	89.477	37.624	1.00	38.31	BBBB
ATOM	6734	N	LEU	B	381	-25.230	91.473	38.555	1.00	35.38	BBBB
ATOM	6735	CA	LEU	B	381	-26.594	91.879	38.859	1.00	34.17	BBBB
ATOM	6736	CB	LEU	B	381	-26.745	92.152	40.352	1.00	31.41	BBBB
ATOM	6737	CG	LEU	B	381	-28.053	92.826	40.771	1.00	33.07	BBBB
ATOM	6738	CD1	LEU	B	381	-29.256	92.073	40.206	1.00	31.24	BBBB
ATOM	6739	CD2	LEU	B	381	-28.121	92.895	42.287	1.00	31.03	BBBB
ATOM	6740	C	LEU	B	381	-26.923	93.151	38.072	1.00	34.39	BBBB
ATOM	6741	O	LEU	B	381	-26.309	94.194	38.275	1.00	34.11	BBBB
ATOM	6742	N	LEU	B	382	-27.884	93.059	37.160	1.00	35.48	BBBB
ATOM	6743	CA	LEU	B	382	-28.295	94.221	36.360	1.00	34.29	BBBB
ATOM	6744	CB	LEU	B	382	-28.189	93.918	34.864	1.00	32.33	BBBB
ATOM	6745	CG	LEU	B	382	-28.790	94.950	33.903	1.00	32.01	BBBB

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ATOM	6746	CD1	LEU	B	382	-27.973	96.243	33.966	1.00	30.40	BBBB
ATOM	6747	CD2	LEU	B	382	-28.793	94.386	32.463	1.00	31.64	BBBB
ATOM	6748	C	LEU	B	382	-29.737	94.583	36.676	1.00	33.34	BBBB
ATOM	6749	O	LEU	B	382	-30.643	93.786	36.442	1.00	34.36	BBBB
ATOM	6750	N	ILE	B	383	-29.946	95.781	37.200	1.00	32.32	BBBB
ATOM	6751	CA	ILE	B	383	-31.285	96.244	37.534	1.00	32.90	BBBB
ATOM	6752	CB	ILE	B	383	-31.393	96.489	39.042	1.00	33.30	BBBB
ATOM	6753	CG2	ILE	B	383	-32.714	97.191	39.380	1.00	30.60	BBBB
ATOM	6754	CG1	ILE	B	383	-31.222	95.161	39.775	1.00	30.66	BBBB
ATOM	6755	CD1	ILE	B	383	-31.288	95.290	41.268	1.00	32.19	BBBB
ATOM	6756	C	ILE	B	383	-31.662	97.530	36.798	1.00	33.58	BBBB
ATOM	6757	O	ILE	B	383	-31.113	98.596	37.087	1.00	32.04	BBBB
ATOM	6758	N	GLN	B	384	-32.599	97.427	35.854	1.00	35.64	BBBB
ATOM	6759	CA	GLN	B	384	-33.055	98.597	35.074	1.00	38.26	BBBB
ATOM	6760	CB	GLN	B	384	-32.904	98.354	33.564	1.00	37.37	BBBB
ATOM	6761	CG	GLN	B	384	-31.472	98.351	33.055	1.00	37.68	BBBB
ATOM	6762	CD	GLN	B	384	-31.366	98.066	31.556	1.00	40.35	BBBB
ATOM	6763	OE1	GLN	B	384	-30.278	98.108	30.980	1.00	41.81	BBBB
ATOM	6764	NE2	GLN	B	384	-32.495	97.771	30.924	1.00	40.34	BBBB
ATOM	6765	C	GLN	B	384	-34.505	98.964	35.383	1.00	39.24	BBBB
ATOM	6766	O	GLN	B	384	-35.021	99.954	34.889	1.00	39.23	BBBB
ATOM	6767	N	ALA	B	385	-35.159	98.158	36.209	1.00	42.47	BBBB
ATOM	6768	CA	ALA	B	385	-36.539	98.417	36.602	1.00	43.99	BBBB
ATOM	6769	CB	ALA	B	385	-37.513	97.755	35.621	1.00	44.14	BBBB
ATOM	6770	C	ALA	B	385	-36.760	97.877	38.005	1.00	45.50	BBBB
ATOM	6771	O	ALA	B	385	-36.029	97.011	38.473	1.00	46.18	BBBB
ATOM	6772	N	TRP	B	386	-37.780	98.386	38.673	1.00	48.11	BBBB
ATOM	6773	CA	TRP	B	386	-38.082	97.957	40.024	1.00	49.84	BBBB
ATOM	6774	CB	TRP	B	386	-37.126	98.635	40.990	1.00	49.46	BBBB
ATOM	6775	CG	TRP	B	386	-36.943	97.901	42.253	1.00	50.54	BBBB
ATOM	6776	CD2	TRP	B	386	-36.427	96.576	42.399	1.00	51.02	BBBB
ATOM	6777	CE2	TRP	B	386	-36.369	96.303	43.781	1.00	51.45	BBBB
ATOM	6778	CE3	TRP	B	386	-36.005	95.590	41.494	1.00	51.37	BBBB
ATOM	6779	CD1	TRP	B	386	-37.176	98.367	43.508	1.00	50.74	BBBB
ATOM	6780	NE1	TRP	B	386	-36.832	97.414	44.436	1.00	52.01	BBBB
ATOM	6781	CZ2	TRP	B	386	-35.903	95.078	44.289	1.00	51.35	BBBB
ATOM	6782	CZ3	TRP	B	386	-35.541	94.370	41.997	1.00	51.76	BBBB
ATOM	6783	CH2	TRP	B	386	-35.496	94.129	43.385	1.00	51.13	BBBB
ATOM	6784	C	TRP	B	386	-39.508	98.384	40.326	1.00	52.06	BBBB
ATOM	6785	O	TRP	B	386	-39.929	99.467	39.927	1.00	52.41	BBBB
ATOM	6786	N	PRO	B	387	-40.271	97.550	41.044	1.00	54.73	BBBB
ATOM	6787	CD	PRO	B	387	-39.898	96.323	41.769	1.00	55.80	BBBB
ATOM	6788	CA	PRO	B	387	-41.652	97.934	41.349	1.00	56.61	BBBB
ATOM	6789	CB	PRO	B	387	-42.080	96.888	42.374	1.00	56.06	BBBB
ATOM	6790	CG	PRO	B	387	-41.246	95.696	42.012	1.00	56.16	BBBB
ATOM	6791	C	PRO	B	387	-41.711	99.353	41.907	1.00	59.04	BBBB
ATOM	6792	O	PRO	B	387	-40.838	99.768	42.671	1.00	59.55	BBBB
ATOM	6793	N	GLU	B	388	-42.735	100.104	41.522	1.00	62.17	BBBB
ATOM	6794	CA	GLU	B	388	-42.863	101.470	42.005	1.00	65.59	BBBB
ATOM	6795	CB	GLU	B	388	-43.950	102.207	41.216	1.00	69.38	BBBB
ATOM	6796	CG	GLU	B	388	-43.639	102.365	39.720	1.00	74.69	BBBB
ATOM	6797	CD	GLU	B	388	-42.416	103.241	39.444	1.00	77.95	BBBB
ATOM	6798	OE1	GLU	B	388	-41.980	103.304	38.267	1.00	79.91	BBBB
ATOM	6799	OE2	GLU	B	388	-41.898	103.871	40.397	1.00	78.20	BBBB
ATOM	6800	C	GLU	B	388	-43.179	101.492	43.499	1.00	65.36	BBBB
ATOM	6801	O	GLU	B	388	-42.793	102.417	44.214	1.00	64.98	BBBB
ATOM	6802	N	ASN	B	389	-43.859	100.451	43.968	1.00	65.40	BBBB
ATOM	6803	CA	ASN	B	389	-44.234	100.347	45.375	1.00	66.07	BBBB
ATOM	6804	CB	ASN	B	389	-45.423	99.393	45.516	1.00	67.95	BBBB
ATOM	6805	CG	ASN	B	389	-46.132	99.545	46.844	1.00	70.36	BBBB
ATOM	6806	OD1	ASN	B	389	-46.855	98.645	47.294	1.00	70.58	BBBB
ATOM	6807	ND2	ASN	B	389	-45.942	100.699	47.479	1.00	71.79	BBBB
ATOM	6808	C	ASN	B	389	-43.085	99.863	46.276	1.00	64.96	BBBB
ATOM	6809	O	ASN	B	389	-43.318	99.195	47.286	1.00	64.77	BBBB
ATOM	6810	N	ARG	B	390	-41.852	100.201	45.912	1.00	62.65	BBBB
ATOM	6811	CA	ARG	B	390	-40.678	99.790	46.683	1.00	60.82	BBBB
ATOM	6812	CB	ARG	B	390	-40.015	98.572	46.037	1.00	62.41	BBBB
ATOM	6813	CG	ARG	B	390	-40.741	97.256	46.238	1.00	62.90	BBBB
ATOM	6814	CD	ARG	B	390	-40.493	96.705	47.622	1.00	65.63	BBBB
ATOM	6815	NE	ARG	B	390	-41.148	95.416	47.819	1.00	68.10	BBBB
ATOM	6816	CZ	ARG	B	390	-42.466	95.244	47.875	1.00	70.05	BBBB
ATOM	6817	NH1	ARG	B	390	-43.289	96.280	47.752	1.00	71.44	BBBB
ATOM	6818	NH2	ARG	B	390	-42.965	94.031	48.061	1.00	70.49	BBBB
ATOM	6819	C	ARG	B	390	-39.680	100.926	46.726	1.00	58.79	BBBB
ATOM	6820	O	ARG	B	390	-39.316	101.464	45.686	1.00	61.19	BBBB

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ATOM	6821	N	THR B 391	-39.221	101.281	47.919	1.00	55.87	BBBB
ATOM	6822	CA	THR B 391	-38.274	102.378	48.068	1.00	53.51	BBBB
ATOM	6823	CB	THR B 391	-38.663	103.258	49.278	1.00	55.34	BBBB
ATOM	6824	OG1	THR B 391	-38.906	102.429	50.426	1.00	56.31	BBBB
ATOM	6825	CG2	THR B 391	-39.922	104.057	48.964	1.00	53.61	BBBB
ATOM	6826	C	THR B 391	-36.798	101.956	48.174	1.00	52.09	BBBB
ATOM	6827	O	THR B 391	-35.899	102.805	48.170	1.00	51.90	BBBB
ATOM	6828	N	ASP B 392	-36.551	100.651	48.276	1.00	49.49	BBBB
ATOM	6829	CA	ASP B 392	-35.187	100.115	48.335	1.00	47.81	BBBB
ATOM	6830	CB	ASP B 392	-34.687	99.999	49.798	1.00	47.01	BBBB
ATOM	6831	CG	ASP B 392	-35.506	99.022	50.648	1.00	47.12	BBBB
ATOM	6832	OD1	ASP B 392	-35.303	98.991	51.881	1.00	42.74	BBBB
ATOM	6833	OD2	ASP B 392	-36.347	98.280	50.096	1.00	49.09	BBBB
ATOM	6834	C	ASP B 392	-35.181	98.751	47.633	1.00	46.82	BBBB
ATOM	6835	O	ASP B 392	-36.248	98.160	47.425	1.00	46.85	BBBB
ATOM	6836	N	LEU B 393	-34.004	98.260	47.245	1.00	44.08	BBBB
ATOM	6837	CA	LEU B 393	-33.931	96.959	46.578	1.00	43.60	BBBB
ATOM	6838	CB	LEU B 393	-32.556	96.751	45.947	1.00	40.44	BBBB
ATOM	6839	CG	LEU B 393	-32.165	97.843	44.946	1.00	37.72	BBBB
ATOM	6840	CD1	LEU B 393	-30.779	97.583	44.399	1.00	36.18	BBBB
ATOM	6841	CD2	LEU B 393	-33.186	97.895	43.831	1.00	36.05	BBBB
ATOM	6842	C	LEU B 393	-34.212	95.884	47.609	1.00	44.72	BBBB
ATOM	6843	O	LEU B 393	-33.348	95.085	47.942	1.00	44.54	BBBB
ATOM	6844	N	HIS B 394	-35.449	95.892	48.101	1.00	47.42	BBBB
ATOM	6845	CA	HIS B 394	-35.940	94.985	49.136	1.00	47.88	BBBB
ATOM	6846	CB	HIS B 394	-37.458	95.141	49.274	1.00	47.78	BBBB
ATOM	6847	CG	HIS B 394	-38.013	94.570	50.543	1.00	48.99	BBBB
ATOM	6848	CD2	HIS B 394	-38.791	93.484	50.766	1.00	48.27	BBBB
ATOM	6849	ND1	HIS B 394	-37.757	95.122	51.783	1.00	47.96	BBBB
ATOM	6850	CE1	HIS B 394	-38.351	94.399	52.714	1.00	47.96	BBBB
ATOM	6851	NE2	HIS B 394	-38.985	93.399	52.125	1.00	50.60	BBBB
ATOM	6852	C	HIS B 394	-35.607	93.509	48.958	1.00	48.39	BBBB
ATOM	6853	O	HIS B 394	-34.955	92.906	49.815	1.00	48.81	BBBB
ATOM	6854	N	ALA B 395	-36.059	92.930	47.850	1.00	47.17	BBBB
ATOM	6855	CA	ALA B 395	-35.834	91.514	47.591	1.00	46.34	BBBB
ATOM	6856	CB	ALA B 395	-36.439	91.138	46.245	1.00	45.22	BBBB
ATOM	6857	C	ALA B 395	-34.370	91.055	47.664	1.00	45.21	BBBB
ATOM	6858	O	ALA B 395	-34.106	89.860	47.759	1.00	45.41	BBBB
ATOM	6859	N	PHE B 396	-33.431	91.998	47.623	1.00	43.04	BBBB
ATOM	6860	CA	PHE B 396	-32.007	91.675	47.698	1.00	41.46	BBBB
ATOM	6861	CB	PHE B 396	-31.245	92.386	46.584	1.00	40.33	BBBB
ATOM	6862	CG	PHE B 396	-31.475	91.807	45.232	1.00	40.15	BBBB
ATOM	6863	CD1	PHE B 396	-31.076	90.505	44.943	1.00	41.35	BBBB
ATOM	6864	CD2	PHE B 396	-32.097	92.551	44.246	1.00	39.20	BBBB
ATOM	6865	CE1	PHE B 396	-31.298	89.952	43.682	1.00	42.94	BBBB
ATOM	6866	CE2	PHE B 396	-32.327	92.011	42.983	1.00	42.03	BBBB
ATOM	6867	CZ	PHE B 396	-31.927	90.709	42.697	1.00	42.45	BBBB
ATOM	6868	C	PHE B 396	-31.380	92.054	49.042	1.00	43.30	BBBB
ATOM	6869	O	PHE B 396	-30.164	92.201	49.145	1.00	42.10	BBBB
ATOM	6870	N	GLU B 397	-32.204	92.214	50.072	1.00	45.16	BBBB
ATOM	6871	CA	GLU B 397	-31.700	92.567	51.397	1.00	48.33	BBBB
ATOM	6872	CB	GLU B 397	-32.879	92.846	52.349	1.00	50.79	BBBB
ATOM	6873	CG	GLU B 397	-33.894	91.707	52.475	1.00	53.54	BBBB
ATOM	6874	CD	GLU B 397	-35.073	92.052	53.392	1.00	56.85	BBBB
ATOM	6875	OE1	GLU B 397	-35.909	91.154	53.645	1.00	57.95	BBBB
ATOM	6876	OE2	GLU B 397	-35.167	93.214	53.860	1.00	57.50	BBBB
ATOM	6877	C	GLU B 397	-30.761	91.508	52.016	1.00	48.11	BBBB
ATOM	6878	O	GLU B 397	-30.060	91.778	52.989	1.00	47.29	BBBB
ATOM	6879	N	ASN B 398	-30.739	90.305	51.456	1.00	47.84	BBBB
ATOM	6880	CA	ASN B 398	-29.871	89.272	52.001	1.00	47.49	BBBB
ATOM	6881	CB	ASN B 398	-30.664	87.986	52.211	1.00	47.68	BBBB
ATOM	6882	CG	ASN B 398	-31.787	88.166	53.216	1.00	49.30	BBBB
ATOM	6883	OD1	ASN B 398	-31.580	88.719	54.300	1.00	51.07	BBBB
ATOM	6884	ND2	ASN B 398	-32.979	87.699	52.867	1.00	46.82	BBBB
ATOM	6885	C	ASN B 398	-28.636	89.012	51.146	1.00	46.70	BBBB
ATOM	6886	O	ASN B 398	-27.706	88.343	51.583	1.00	48.90	BBBB
ATOM	6887	N	LEU B 399	-28.621	89.555	49.935	1.00	43.63	BBBB
ATOM	6888	CA	LEU B 399	-27.483	89.385	49.042	1.00	40.70	BBBB
ATOM	6889	CB	LEU B 399	-27.684	90.219	47.780	1.00	37.65	BBBB
ATOM	6890	CG	LEU B 399	-26.659	89.989	46.680	1.00	33.44	BBBB
ATOM	6891	CD1	LEU B 399	-26.860	88.603	46.134	1.00	31.30	BBBB
ATOM	6892	CD2	LEU B 399	-26.834	91.029	45.579	1.00	34.12	BBBB
ATOM	6893	C	LEU B 399	-26.197	89.814	49.740	1.00	40.33	BBBB
ATOM	6894	O	LEU B 399	-26.077	90.946	50.188	1.00	39.17	BBBB
ATOM	6895	N	GLU B 400	-25.234	88.900	49.809	1.00	42.82	BBBB

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ATOM	6896	CA	GLU	B	400	-23.956	89.153	50.475	1.00	42.80	BBBB
ATOM	6897	CB	GLU	B	400	-23.689	88.090	51.546	1.00	45.26	BBBB
ATOM	6898	CG	GLU	B	400	-24.930	87.429	52.152	1.00	48.87	BBBB
ATOM	6899	CD	GLU	B	400	-24.590	86.267	53.087	1.00	51.78	BBBB
ATOM	6900	OE1	GLU	B	400	-25.526	85.543	53.515	1.00	51.57	BBBB
ATOM	6901	OE2	GLU	B	400	-23.388	86.081	53.394	1.00	51.61	BBBB
ATOM	6902	C	GLU	B	400	-22.801	89.113	49.502	1.00	41.76	BBBB
ATOM	6903	O	GLU	B	400	-21.797	89.786	49.708	1.00	42.02	BBBB
ATOM	6904	N	ILE	B	401	-22.949	88.321	48.441	1.00	41.77	BBBB
ATOM	6905	CA	ILE	B	401	-21.885	88.154	47.453	1.00	40.52	BBBB
ATOM	6906	CB	ILE	B	401	-21.196	86.772	47.619	1.00	41.29	BBBB
ATOM	6907	CG2	ILE	B	401	-19.938	86.697	46.758	1.00	39.42	BBBB
ATOM	6908	CG1	ILE	B	401	-20.834	86.539	49.082	1.00	44.31	BBBB
ATOM	6909	CD1	ILE	B	401	-20.242	85.170	49.351	1.00	47.18	BBBB
ATOM	6910	C	ILE	B	401	-22.270	88.248	45.977	1.00	39.81	BBBB
ATOM	6911	O	ILE	B	401	-23.274	87.682	45.539	1.00	39.51	BBBB
ATOM	6912	N	ILE	B	402	-21.438	88.958	45.223	1.00	37.78	BBBB
ATOM	6913	CA	ILE	B	402	-21.581	89.090	43.780	1.00	37.35	BBBB
ATOM	6914	CB	ILE	B	402	-21.975	90.536	43.323	1.00	35.22	BBBB
ATOM	6915	CG2	ILE	B	402	-22.105	90.569	41.808	1.00	32.69	BBBB
ATOM	6916	CG1	ILE	B	402	-23.322	90.958	43.917	1.00	34.24	BBBB
ATOM	6917	CD1	ILE	B	402	-23.733	92.378	43.553	1.00	31.98	BBBB
ATOM	6918	C	ILE	B	402	-20.159	88.805	43.296	1.00	38.11	BBBB
ATOM	6919	O	ILE	B	402	-19.256	89.615	43.508	1.00	38.52	BBBB
ATOM	6920	N	ARG	B	403	-19.942	87.663	42.661	1.00	38.43	BBBB
ATOM	6921	CA	ARG	B	403	-18.596	87.343	42.208	1.00	40.22	BBBB
ATOM	6922	CB	ARG	B	403	-18.436	85.827	42.060	1.00	40.88	BBBB
ATOM	6923	CG	ARG	B	403	-18.675	85.129	43.378	1.00	40.11	BBBB
ATOM	6924	CD	ARG	B	403	-18.276	83.671	43.406	1.00	44.54	BBBB
ATOM	6925	NE	ARG	B	403	-18.598	83.125	44.723	1.00	46.61	BBBB
ATOM	6926	CZ	ARG	B	403	-17.938	83.428	45.834	1.00	45.82	BBBB
ATOM	6927	NH1	ARG	B	403	-16.900	84.253	45.790	1.00	43.42	BBBB
ATOM	6928	NH2	ARG	B	403	-18.359	82.959	46.997	1.00	45.94	BBBB
ATOM	6929	C	ARG	B	403	-18.192	88.061	40.932	1.00	41.88	BBBB
ATOM	6930	O	ARG	B	403	-17.042	88.491	40.803	1.00	44.56	BBBB
ATOM	6931	N	GLY	B	404	-19.125	88.198	39.992	1.00	41.51	BBBB
ATOM	6932	CA	GLY	B	404	-18.822	88.901	38.757	1.00	38.91	BBBB
ATOM	6933	C	GLY	B	404	-17.971	88.120	37.779	1.00	38.00	BBBB
ATOM	6934	O	GLY	B	404	-17.163	88.693	37.047	1.00	36.22	BBBB
ATOM	6935	N	ARG	B	405	-18.156	86.806	37.756	1.00	38.70	BBBB
ATOM	6936	CA	ARG	B	405	-17.389	85.969	36.844	1.00	39.49	BBBB
ATOM	6937	CB	ARG	B	405	-17.634	84.493	37.158	1.00	38.96	BBBB
ATOM	6938	CG	ARG	B	405	-17.008	84.084	38.482	1.00	40.18	BBBB
ATOM	6939	CD	ARG	B	405	-17.285	82.638	38.830	1.00	44.87	BBBB
ATOM	6940	NE	ARG	B	405	-16.886	82.343	40.207	1.00	46.94	BBBB
ATOM	6941	CZ	ARG	B	405	-17.357	81.321	40.914	1.00	46.56	BBBB
ATOM	6942	NH1	ARG	B	405	-18.235	80.492	40.368	1.00	45.71	BBBB
ATOM	6943	NH2	ARG	B	405	-16.985	81.149	42.175	1.00	46.42	BBBB
ATOM	6944	C	ARG	B	405	-17.789	86.312	35.420	1.00	39.86	BBBB
ATOM	6945	O	ARG	B	405	-17.064	86.053	34.465	1.00	40.56	BBBB
ATOM	6946	N	THR	B	406	-18.960	86.917	35.300	1.00	40.15	BBBB
ATOM	6947	CA	THR	B	406	-19.493	87.349	34.028	1.00	38.73	BBBB
ATOM	6948	CB	THR	B	406	-20.703	86.510	33.633	1.00	38.35	BBBB
ATOM	6949	OG1	THR	B	406	-21.579	86.399	34.757	1.00	40.45	BBBB
ATOM	6950	CG2	THR	B	406	-20.279	85.122	33.199	1.00	37.02	BBBB
ATOM	6951	C	THR	B	406	-19.917	88.766	34.355	1.00	40.18	BBBB
ATOM	6952	O	THR	B	406	-20.298	89.041	35.482	1.00	40.56	BBBB
ATOM	6953	N	LYS	B	407	-19.844	89.669	33.389	1.00	40.80	BBBB
ATOM	6954	CA	LYS	B	407	-20.201	91.051	33.642	1.00	41.10	BBBB
ATOM	6955	CB	LYS	B	407	-18.929	91.871	33.816	1.00	41.66	BBBB
ATOM	6956	CG	LYS	B	407	-17.879	91.166	34.608	1.00	41.33	BBBB
ATOM	6957	CD	LYS	B	407	-16.566	91.903	34.529	1.00	42.57	BBBB
ATOM	6958	CE	LYS	B	407	-15.462	91.142	35.251	1.00	41.59	BBBB
ATOM	6959	NZ	LYS	B	407	-14.148	91.764	34.936	1.00	45.32	BBBB
ATOM	6960	C	LYS	B	407	-21.018	91.628	32.491	1.00	42.17	BBBB
ATOM	6961	O	LYS	B	407	-20.843	91.224	31.335	1.00	43.24	BBBB
ATOM	6962	N	GLN	B	408	-21.911	92.564	32.809	1.00	40.01	BBBB
ATOM	6963	CA	GLN	B	408	-22.722	93.195	31.782	1.00	38.32	BBBB
ATOM	6964	CB	GLN	B	408	-23.832	94.048	32.391	1.00	38.29	BBBB
ATOM	6965	CG	GLN	B	408	-24.484	94.982	31.390	1.00	39.28	BBBB
ATOM	6966	CD	GLN	B	408	-25.340	94.264	30.365	1.00	41.49	BBBB
ATOM	6967	OE1	GLN	B	408	-24.975	93.200	29.859	1.00	40.36	BBBB
ATOM	6968	NE2	GLN	B	408	-26.487	94.856	30.040	1.00	41.31	BBBB
ATOM	6969	C	GLN	B	408	-21.798	94.063	30.961	1.00	37.50	BBBB
ATOM	6970	O	GLN	B	408	-21.079	94.908	31.503	1.00	36.28	BBBB

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ATOM	6971	N	HIS	B	409	-21.825	93.831	29.650	1.00	38.03	BBBB
ATOM	6972	CA	HIS	B	409	-20.993	94.538	28.682	1.00	38.12	BBBB
ATOM	6973	CB	HIS	B	409	-21.302	96.033	28.704	1.00	38.22	BBBB
ATOM	6974	CG	HIS	B	409	-22.647	96.364	28.129	1.00	40.86	BBBB
ATOM	6975	CD2	HIS	B	409	-23.429	95.687	27.252	1.00	39.33	BBBB
ATOM	6976	ND1	HIS	B	409	-23.362	97.487	28.493	1.00	39.97	BBBB
ATOM	6977	CE1	HIS	B	409	-24.527	97.481	27.871	1.00	41.23	BBBB
ATOM	6978	NE2	HIS	B	409	-24.593	96.400	27.113	1.00	38.79	BBBB
ATOM	6979	C	HIS	B	409	-19.523	94.281	28.930	1.00	39.37	BBBB
ATOM	6980	O	HIS	B	409	-18.663	95.023	28.460	1.00	41.26	BBBB
ATOM	6981	N	GLY	B	410	-19.239	93.201	29.652	1.00	39.38	BBBB
ATOM	6982	CA	GLY	B	410	-17.870	92.854	29.945	1.00	40.69	BBBB
ATOM	6983	C	GLY	B	410	-17.256	93.844	30.910	1.00	42.15	BBBB
ATOM	6984	O	GLY	B	410	-16.042	93.914	31.050	1.00	43.09	BBBB
ATOM	6985	N	GLN	B	411	-18.083	94.618	31.597	1.00	43.04	BBBB
ATOM	6986	CA	GLN	B	411	-17.521	95.579	32.525	1.00	42.50	BBBB
ATOM	6987	CB	GLN	B	411	-17.524	96.973	31.908	1.00	41.87	BBBB
ATOM	6988	CG	GLN	B	411	-16.871	98.002	32.801	1.00	43.73	BBBB
ATOM	6989	CD	GLN	B	411	-16.766	99.347	32.144	1.00	46.19	BBBB
ATOM	6990	OE1	GLN	B	411	-16.684	99.441	30.918	1.00	50.30	BBBB
ATOM	6991	NE2	GLN	B	411	-16.746	100.404	32.948	1.00	46.99	BBBB
ATOM	6992	C	GLN	B	411	-18.163	95.660	33.899	1.00	42.41	BBBB
ATOM	6993	O	GLN	B	411	-17.471	95.942	34.881	1.00	43.77	BBBB
ATOM	6994	N	PHE	B	412	-19.459	95.391	33.998	1.00	40.67	BBBB
ATOM	6995	CA	PHE	B	412	-20.095	95.555	35.292	1.00	38.97	BBBB
ATOM	6996	CB	PHE	B	412	-21.125	96.675	35.211	1.00	36.67	BBBB
ATOM	6997	CG	PHE	B	412	-20.634	97.905	34.507	1.00	36.34	BBBB
ATOM	6998	CD1	PHE	B	412	-20.598	97.959	33.110	1.00	37.08	BBBB
ATOM	6999	CD2	PHE	B	412	-20.264	99.037	35.229	1.00	37.04	BBBB
ATOM	7000	CE1	PHE	B	412	-20.213	99.130	32.445	1.00	36.17	BBBB
ATOM	7001	CE2	PHE	B	412	-19.876	100.217	34.571	1.00	36.51	BBBB
ATOM	7002	CZ	PHE	B	412	-19.854	100.263	33.182	1.00	34.91	BBBB
ATOM	7003	C	PHE	B	412	-20.732	94.354	35.943	1.00	40.01	BBBB
ATOM	7004	O	PHE	B	412	-21.360	93.516	35.291	1.00	41.72	BBBB
ATOM	7005	N	SER	B	413	-20.571	94.293	37.260	1.00	39.28	BBBB
ATOM	7006	CA	SER	B	413	-21.124	93.209	38.049	1.00	37.66	BBBB
ATOM	7007	CB	SER	B	413	-20.056	92.661	39.000	1.00	39.67	BBBB
ATOM	7008	OG	SER	B	413	-19.203	93.697	39.459	1.00	41.64	BBBB
ATOM	7009	C	SER	B	413	-22.336	93.728	38.811	1.00	35.28	BBBB
ATOM	7010	O	SER	B	413	-23.185	92.949	39.230	1.00	34.67	BBBB
ATOM	7011	N	LEU	B	414	-22.395	95.044	39.006	1.00	32.55	BBBB
ATOM	7012	CA	LEU	B	414	-23.541	95.675	39.665	1.00	32.56	BBBB
ATOM	7013	CB	LEU	B	414	-23.245	96.091	41.110	1.00	31.14	BBBB
ATOM	7014	CG	LEU	B	414	-24.531	96.537	41.821	1.00	29.60	BBBB
ATOM	7015	CD1	LEU	B	414	-25.481	95.354	41.901	1.00	30.38	BBBB
ATOM	7016	CD2	LEU	B	414	-24.247	97.069	43.198	1.00	25.24	BBBB
ATOM	7017	C	LEU	B	414	-23.948	96.916	38.861	1.00	34.14	BBBB
ATOM	7018	O	LEU	B	414	-23.169	97.860	38.678	1.00	33.24	BBBB
ATOM	7019	N	ALA	B	415	-25.174	96.882	38.358	1.00	34.74	BBBB
ATOM	7020	CA	ALA	B	415	-25.707	97.973	37.573	1.00	34.11	BBBB
ATOM	7021	CB	ALA	B	415	-25.638	97.636	36.108	1.00	34.15	BBBB
ATOM	7022	C	ALA	B	415	-27.146	98.227	37.987	1.00	34.36	BBBB
ATOM	7023	O	ALA	B	415	-28.049	97.447	37.678	1.00	34.06	BBBB
ATOM	7024	N	VAL	B	416	-27.339	99.308	38.725	1.00	33.37	BBBB
ATOM	7025	CA	VAL	B	416	-28.655	99.706	39.166	1.00	33.91	BBBB
ATOM	7026	CB	VAL	B	416	-28.692	99.876	40.676	1.00	31.46	BBBB
ATOM	7027	CG1	VAL	B	416	-30.104	100.166	41.130	1.00	30.77	BBBB
ATOM	7028	CG2	VAL	B	416	-28.178	98.610	41.328	1.00	31.56	BBBB
ATOM	7029	C	VAL	B	416	-28.808	101.039	38.461	1.00	35.77	BBBB
ATOM	7030	O	VAL	B	416	-28.041	101.974	38.716	1.00	37.67	BBBB
ATOM	7031	N	VAL	B	417	-29.780	101.115	37.555	1.00	35.55	BBBB
ATOM	7032	CA	VAL	B	417	-29.984	102.320	36.762	1.00	34.87	BBBB
ATOM	7033	CB	VAL	B	417	-29.442	102.108	35.331	1.00	33.89	BBBB
ATOM	7034	CG1	VAL	B	417	-29.781	103.292	34.469	1.00	37.18	BBBB
ATOM	7035	CG2	VAL	B	417	-27.937	101.906	35.360	1.00	33.52	BBBB
ATOM	7036	C	VAL	B	417	-31.409	102.843	36.628	1.00	35.87	BBBB
ATOM	7037	O	VAL	B	417	-32.366	102.081	36.460	1.00	35.70	BBBB
ATOM	7038	N	SER	B	418	-31.523	104.165	36.694	1.00	37.69	BBBB
ATOM	7039	CA	SER	B	418	-32.785	104.879	36.521	1.00	38.58	BBBB
ATOM	7040	CB	SER	B	418	-33.088	105.012	35.030	1.00	39.14	BBBB
ATOM	7041	OG	SER	B	418	-33.352	103.745	34.471	1.00	38.70	BBBB
ATOM	7042	C	SER	B	418	-34.014	104.333	37.216	1.00	38.89	BBBB
ATOM	7043	O	SER	B	418	-35.050	104.140	36.587	1.00	38.12	BBBB
ATOM	7044	N	LEU	B	419	-33.905	104.113	38.520	1.00	40.62	BBBB
ATOM	7045	CA	LEU	B	419	-35.016	103.602	39.308	1.00	41.29	BBBB

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ATOM	7046	CB	LEU	B	419	-34.535	102.463	40.204	1.00	40.51	BBBB
ATOM	7047	CG	LEU	B	419	-33.874	101.261	39.541	1.00	37.61	BBBB
ATOM	7048	CD1	LEU	B	419	-33.539	100.256	40.632	1.00	38.77	BBBB
ATOM	7049	CD2	LEU	B	419	-34.808	100.624	38.506	1.00	36.23	BBBB
ATOM	7050	C	LEU	B	419	-35.527	104.742	40.172	1.00	42.06	BBBB
ATOM	7051	O	LEU	B	419	-34.879	105.779	40.248	1.00	42.42	BBBB
ATOM	7052	N	ASN	B	420	-36.672	104.548	40.823	1.00	43.61	BBBB
ATOM	7053	CA	ASN	B	420	-37.240	105.578	41.691	1.00	45.79	BBBB
ATOM	7054	CB	ASN	B	420	-38.769	105.710	41.482	1.00	49.03	BBBB
ATOM	7055	CG	ASN	B	420	-39.147	106.396	40.156	1.00	53.79	BBBB
ATOM	7056	OD1	ASN	B	420	-38.557	107.412	39.771	1.00	54.41	BBBB
ATOM	7057	ND2	ASN	B	420	-40.155	105.846	39.464	1.00	54.96	BBBB
ATOM	7058	C	ASN	B	420	-36.973	105.295	43.174	1.00	45.79	BBBB
ATOM	7059	O	ASN	B	420	-37.564	105.943	44.039	1.00	46.59	BBBB
ATOM	7060	N	ILE	B	421	-36.102	104.328	43.472	1.00	45.70	BBBB
ATOM	7061	CA	ILE	B	421	-35.786	103.979	44.865	1.00	43.29	BBBB
ATOM	7062	CB	ILE	B	421	-34.838	102.770	44.962	1.00	42.43	BBBB
ATOM	7063	CG2	ILE	B	421	-35.518	101.536	44.423	1.00	43.00	BBBB
ATOM	7064	CG1	ILE	B	421	-33.540	103.068	44.216	1.00	41.33	BBBB
ATOM	7065	CD1	ILE	B	421	-32.463	102.043	44.428	1.00	41.72	BBBB
ATOM	7066	C	ILE	B	421	-35.134	105.123	45.652	1.00	44.00	BBBB
ATOM	7067	O	ILE	B	421	-34.467	106.001	45.088	1.00	41.88	BBBB
ATOM	7068	N	THR	B	422	-35.320	105.089	46.967	1.00	44.20	BBBB
ATOM	7069	CA	THR	B	422	-34.773	106.111	47.843	1.00	45.31	BBBB
ATOM	7070	CB	THR	B	422	-35.752	106.425	48.970	1.00	46.63	BBBB
ATOM	7071	OG1	THR	B	422	-36.990	106.853	48.397	1.00	48.59	BBBB
ATOM	7072	CG2	THR	B	422	-35.210	107.532	49.851	1.00	47.47	BBBB
ATOM	7073	C	THR	B	422	-33.437	105.698	48.442	1.00	43.69	BBBB
ATOM	7074	O	THR	B	422	-32.591	106.544	48.747	1.00	43.45	BBBB
ATOM	7075	N	SER	B	423	-33.253	104.393	48.601	1.00	41.95	BBBB
ATOM	7076	CA	SER	B	423	-32.014	103.855	49.157	1.00	40.37	BBBB
ATOM	7077	CB	SER	B	423	-32.095	103.799	50.686	1.00	39.55	BBBB
ATOM	7078	OG	SER	B	423	-33.187	103.008	51.113	1.00	36.55	BBBB
ATOM	7079	C	SER	B	423	-31.755	102.463	48.608	1.00	38.66	BBBB
ATOM	7080	O	SER	B	423	-32.689	101.692	48.383	1.00	38.58	BBBB
ATOM	7081	N	LEU	B	424	-30.485	102.143	48.393	1.00	35.73	BBBB
ATOM	7082	CA	LEU	B	424	-30.135	100.838	47.863	1.00	33.90	BBBB
ATOM	7083	CB	LEU	B	424	-28.613	100.732	47.715	1.00	31.12	BBBB
ATOM	7084	CG	LEU	B	424	-28.110	101.651	46.590	1.00	29.08	BBBB
ATOM	7085	CD1	LEU	B	424	-26.649	101.444	46.328	1.00	27.70	BBBB
ATOM	7086	CD2	LEU	B	424	-28.880	101.334	45.331	1.00	27.18	BBBB
ATOM	7087	C	LEU	B	424	-30.709	99.705	48.717	1.00	33.70	BBBB
ATOM	7088	O	LEU	B	424	-31.399	98.811	48.194	1.00	33.18	BBBB
ATOM	7089	N	GLY	B	425	-30.447	99.756	50.024	1.00	32.88	BBBB
ATOM	7090	CA	GLY	B	425	-30.960	98.747	50.939	1.00	29.79	BBBB
ATOM	7091	C	GLY	B	425	-30.222	97.424	50.897	1.00	31.08	BBBB
ATOM	7092	O	GLY	B	425	-30.730	96.406	51.364	1.00	32.47	BBBB
ATOM	7093	N	LEU	B	426	-29.029	97.421	50.315	1.00	31.57	BBBB
ATOM	7094	CA	LEU	B	426	-28.238	96.202	50.237	1.00	32.92	BBBB
ATOM	7095	CB	LEU	B	426	-27.327	96.262	49.005	1.00	32.16	BBBB
ATOM	7096	CG	LEU	B	426	-28.052	96.447	47.654	1.00	31.86	BBBB
ATOM	7097	CD1	LEU	B	426	-27.029	96.665	46.544	1.00	29.93	BBBB
ATOM	7098	CD2	LEU	B	426	-28.933	95.244	47.336	1.00	28.80	BBBB
ATOM	7099	C	LEU	B	426	-27.426	96.061	51.536	1.00	34.66	BBBB
ATOM	7100	O	LEU	B	426	-26.190	96.076	51.533	1.00	31.92	BBBB
ATOM	7101	N	ARG	B	427	-28.156	95.928	52.644	1.00	37.23	BBBB
ATOM	7102	CA	ARG	B	427	-27.583	95.791	53.989	1.00	40.49	BBBB
ATOM	7103	CB	ARG	B	427	-28.703	95.711	55.026	1.00	38.97	BBBB
ATOM	7104	CG	ARG	B	427	-29.521	96.984	55.139	1.00	43.44	BBBB
ATOM	7105	CD	ARG	B	427	-30.537	96.904	56.263	1.00	44.85	BBBB
ATOM	7106	NE	ARG	B	427	-31.448	95.776	56.088	1.00	50.19	BBBB
ATOM	7107	CZ	ARG	B	427	-32.435	95.735	55.199	1.00	52.96	BBBB
ATOM	7108	NH1	ARG	B	427	-32.657	96.770	54.390	1.00	54.03	BBBB
ATOM	7109	NH2	ARG	B	427	-33.196	94.650	55.112	1.00	54.60	BBBB
ATOM	7110	C	ARG	B	427	-26.615	94.617	54.208	1.00	41.40	BBBB
ATOM	7111	O	ARG	B	427	-25.656	94.747	54.970	1.00	41.09	BBBB
ATOM	7112	N	SER	B	428	-26.858	93.485	53.551	1.00	40.93	BBBB
ATOM	7113	CA	SER	B	428	-25.984	92.324	53.703	1.00	42.78	BBBB
ATOM	7114	CB	SER	B	428	-26.783	91.044	53.486	1.00	42.04	BBBB
ATOM	7115	OG	SER	B	428	-27.983	91.083	54.220	1.00	42.76	BBBB
ATOM	7116	C	SER	B	428	-24.786	92.315	52.746	1.00	43.63	BBBB
ATOM	7117	O	SER	B	428	-23.813	91.597	52.957	1.00	45.12	BBBB
ATOM	7118	N	LEU	B	429	-24.855	93.105	51.688	1.00	44.54	BBBB
ATOM	7119	CA	LEU	B	429	-23.779	93.117	50.710	1.00	44.94	BBBB
ATOM	7120	CB	LEU	B	429	-24.018	94.237	49.689	1.00	43.34	BBBB

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ATOM	7121	CG	LEU	B	429	-23.141	94.250	48.436	1.00	42.06	BBBB
ATOM	7122	CD1	LEU	B	429	-23.158	92.891	47.768	1.00	39.39	BBBB
ATOM	7123	CD2	LEU	B	429	-23.650	95.321	47.491	1.00	40.98	BBBB
ATOM	7124	C	LEU	B	429	-22.410	93.259	51.370	1.00	45.50	BBBB
ATOM	7125	O	LEU	B	429	-22.132	94.236	52.055	1.00	45.45	BBBB
ATOM	7126	N	LYS	B	430	-21.551	92.271	51.151	1.00	47.66	BBBB
ATOM	7127	CA	LYS	B	430	-20.224	92.293	51.742	1.00	49.16	BBBB
ATOM	7128	CB	LYS	B	430	-20.109	91.187	52.795	1.00	52.11	BBBB
ATOM	7129	CG	LYS	B	430	-19.854	91.720	54.197	1.00	57.92	BBBB
ATOM	7130	CD	LYS	B	430	-20.897	92.774	54.615	1.00	59.69	BBBB
ATOM	7131	CE	LYS	B	430	-20.422	93.602	55.819	1.00	60.90	BBBB
ATOM	7132	NZ	LYS	B	430	-19.212	94.434	55.509	1.00	60.86	BBBB
ATOM	7133	C	LYS	B	430	-19.077	92.182	50.755	1.00	48.01	BBBB
ATOM	7134	O	LYS	B	430	-17.950	92.534	51.080	1.00	47.79	BBBB
ATOM	7135	N	GLU	B	431	-19.347	91.698	49.549	1.00	48.09	BBBB
ATOM	7136	CA	GLU	B	431	-18.274	91.565	48.568	1.00	47.33	BBBB
ATOM	7137	CB	GLU	B	431	-17.497	90.264	48.806	1.00	49.97	BBBB
ATOM	7138	CG	GLU	B	431	-16.239	90.134	47.958	1.00	53.48	BBBB
ATOM	7139	CD	GLU	B	431	-15.623	88.746	48.015	1.00	56.84	BBBB
ATOM	7140	OE1	GLU	B	431	-14.551	88.539	47.387	1.00	55.24	BBBB
ATOM	7141	OE2	GLU	B	431	-16.215	87.865	48.687	1.00	58.61	BBBB
ATOM	7142	C	GLU	B	431	-18.720	91.598	47.114	1.00	45.05	BBBB
ATOM	7143	O	GLU	B	431	-19.751	91.040	46.741	1.00	45.88	BBBB
ATOM	7144	N	ILE	B	432	-17.917	92.264	46.299	1.00	42.64	BBBB
ATOM	7145	CA	ILE	B	432	-18.145	92.364	44.868	1.00	41.60	BBBB
ATOM	7146	CB	ILE	B	432	-18.502	93.812	44.453	1.00	42.27	BBBB
ATOM	7147	CG2	ILE	B	432	-18.656	93.912	42.945	1.00	42.11	BBBB
ATOM	7148	CG1	ILE	B	432	-19.820	94.223	45.104	1.00	39.65	BBBB
ATOM	7149	CD1	ILE	B	432	-20.177	95.670	44.864	1.00	44.05	BBBB
ATOM	7150	C	ILE	B	432	-16.771	91.960	44.374	1.00	41.16	BBBB
ATOM	7151	O	ILE	B	432	-15.881	92.789	44.177	1.00	41.25	BBBB
ATOM	7152	N	SER	B	433	-16.606	90.652	44.228	1.00	41.89	BBBB
ATOM	7153	CA	SER	B	433	-15.345	90.030	43.833	1.00	40.93	BBBB
ATOM	7154	CB	SER	B	433	-15.579	88.545	43.582	1.00	39.44	BBBB
ATOM	7155	OG	SER	B	433	-16.370	87.986	44.618	1.00	39.67	BBBB
ATOM	7156	C	SER	B	433	-14.631	90.643	42.642	1.00	42.11	BBBB
ATOM	7157	O	SER	B	433	-13.425	90.896	42.701	1.00	41.78	BBBB
ATOM	7158	N	ASP	B	434	-15.367	90.886	41.563	1.00	42.98	BBBB
ATOM	7159	CA	ASP	B	434	-14.754	91.447	40.364	1.00	44.47	BBBB
ATOM	7160	CB	ASP	B	434	-14.333	90.292	39.438	1.00	44.54	BBBB
ATOM	7161	CG	ASP	B	434	-13.368	90.723	38.337	1.00	45.04	BBBB
ATOM	7162	OD1	ASP	B	434	-12.869	91.866	38.372	1.00	43.36	BBBB
ATOM	7163	OD2	ASP	B	434	-13.101	89.897	37.440	1.00	44.63	BBBB
ATOM	7164	C	ASP	B	434	-15.745	92.365	39.661	1.00	43.99	BBBB
ATOM	7165	O	ASP	B	434	-16.915	92.412	40.030	1.00	45.14	BBBB
ATOM	7166	N	GLY	B	435	-15.263	93.113	38.674	1.00	42.80	BBBB
ATOM	7167	CA	GLY	B	435	-16.132	93.988	37.908	1.00	41.10	BBBB
ATOM	7168	C	GLY	B	435	-16.469	95.329	38.516	1.00	40.78	BBBB
ATOM	7169	O	GLY	B	435	-16.512	95.477	39.737	1.00	39.11	BBBB
ATOM	7170	N	ASP	B	436	-16.726	96.305	37.646	1.00	39.55	BBBB
ATOM	7171	CA	ASP	B	436	-17.069	97.656	38.068	1.00	37.79	BBBB
ATOM	7172	CB	ASP	B	436	-16.771	98.646	36.941	1.00	39.45	BBBB
ATOM	7173	CG	ASP	B	436	-15.271	98.785	36.667	1.00	42.51	BBBB
ATOM	7174	OD1	ASP	B	436	-14.480	98.096	37.355	1.00	42.39	BBBB
ATOM	7175	OD2	ASP	B	436	-14.887	99.578	35.769	1.00	41.03	BBBB
ATOM	7176	C	ASP	B	436	-18.521	97.780	38.515	1.00	35.59	BBBB
ATOM	7177	O	ASP	B	436	-19.348	96.922	38.216	1.00	35.72	BBBB
ATOM	7178	N	VAL	B	437	-18.803	98.847	39.259	1.00	35.26	BBBB
ATOM	7179	CA	VAL	B	437	-20.134	99.137	39.791	1.00	35.05	BBBB
ATOM	7180	CB	VAL	B	437	-20.112	99.287	41.330	1.00	35.32	BBBB
ATOM	7181	CG1	VAL	B	437	-21.461	99.817	41.811	1.00	32.87	BBBB
ATOM	7182	CG2	VAL	B	437	-19.763	97.958	41.996	1.00	32.52	BBBB
ATOM	7183	C	VAL	B	437	-20.678	100.453	39.246	1.00	34.63	BBBB
ATOM	7184	O	VAL	B	437	-19.980	101.476	39.256	1.00	33.59	BBBB
ATOM	7185	N	ILE	B	438	-21.918	100.437	38.772	1.00	33.23	BBBB
ATOM	7186	CA	ILE	B	438	-22.519	101.671	38.276	1.00	32.12	BBBB
ATOM	7187	CB	ILE	B	438	-22.588	101.742	36.730	1.00	32.39	BBBB
ATOM	7188	CG2	ILE	B	438	-23.570	100.717	36.188	1.00	31.12	BBBB
ATOM	7189	CG1	ILE	B	438	-22.995	103.168	36.319	1.00	34.08	BBBB
ATOM	7190	CD1	ILE	B	438	-23.048	103.428	34.826	1.00	31.51	BBBB
ATOM	7191	C	ILE	B	438	-23.907	101.881	38.829	1.00	31.17	BBBB
ATOM	7192	O	ILE	B	438	-24.776	101.011	38.766	1.00	29.98	BBBB
ATOM	7193	N	ILE	B	439	-24.098	103.054	39.403	1.00	32.92	BBBB
ATOM	7194	CA	ILE	B	439	-25.378	103.425	39.980	1.00	34.64	BBBB
ATOM	7195	CB	ILE	B	439	-25.299	103.362	41.518	1.00	31.20	BBBB

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ATOM	7196	CG2	ILE	B	439	-26.602	103.776	42.138	1.00	27.22	BBBB
ATOM	7197	CG1	ILE	B	439	-24.949	101.928	41.926	1.00	29.75	BBBB
ATOM	7198	CD1	ILE	B	439	-24.936	101.671	43.383	1.00	32.36	BBBB
ATOM	7199	C	ILE	B	439	-25.637	104.834	39.482	1.00	36.91	BBBB
ATOM	7200	O	ILE	B	439	-24.959	105.778	39.877	1.00	38.64	BBBB
ATOM	7201	N	SER	B	440	-26.587	104.972	38.570	1.00	37.94	BBBB
ATOM	7202	CA	SER	B	440	-26.877	106.288	38.031	1.00	38.31	BBBB
ATOM	7203	CB	SER	B	440	-25.887	106.632	36.937	1.00	40.88	BBBB
ATOM	7204	OG	SER	B	440	-26.180	105.871	35.782	1.00	47.04	BBBB
ATOM	7205	C	SER	B	440	-28.263	106.371	37.451	1.00	37.32	BBBB
ATOM	7206	O	SER	B	440	-28.866	105.358	37.107	1.00	35.80	BBBB
ATOM	7207	N	GLY	B	441	-28.754	107.596	37.337	1.00	37.58	BBBB
ATOM	7208	CA	GLY	B	441	-30.072	107.809	36.790	1.00	39.06	BBBB
ATOM	7209	C	GLY	B	441	-31.182	107.522	37.773	1.00	41.14	BBBB
ATOM	7210	O	GLY	B	441	-32.336	107.423	37.375	1.00	42.86	BBBB
ATOM	7211	N	ASN	B	442	-30.846	107.386	39.053	1.00	41.60	BBBB
ATOM	7212	CA	ASN	B	442	-31.851	107.133	40.083	1.00	41.63	BBBB
ATOM	7213	CB	ASN	B	442	-31.340	106.080	41.051	1.00	40.50	BBBB
ATOM	7214	CG	ASN	B	442	-30.944	104.816	40.356	1.00	38.82	BBBB
ATOM	7215	OD1	ASN	B	442	-31.794	104.030	39.915	1.00	38.59	BBBB
ATOM	7216	ND2	ASN	B	442	-29.645	104.608	40.232	1.00	39.70	BBBB
ATOM	7217	C	ASN	B	442	-32.064	108.455	40.797	1.00	43.32	BBBB
ATOM	7218	O	ASN	B	442	-31.392	108.762	41.783	1.00	44.54	BBBB
ATOM	7219	N	LYS	B	443	-33.010	109.233	40.280	1.00	46.16	BBBB
ATOM	7220	CA	LYS	B	443	-33.327	110.572	40.780	1.00	45.49	BBBB
ATOM	7221	CB	LYS	B	443	-34.488	111.138	39.972	1.00	45.01	BBBB
ATOM	7222	CG	LYS	B	443	-34.296	111.050	38.469	1.00	46.89	BBBB
ATOM	7223	CD	LYS	B	443	-33.116	111.882	37.954	1.00	48.64	BBBB
ATOM	7224	CE	LYS	B	443	-31.770	111.149	38.044	1.00	49.33	BBBB
ATOM	7225	NZ	LYS	B	443	-30.721	111.790	37.178	1.00	46.87	BBBB
ATOM	7226	C	LYS	B	443	-33.616	110.741	42.270	1.00	46.06	BBBB
ATOM	7227	O	LYS	B	443	-33.438	111.831	42.805	1.00	46.30	BBBB
ATOM	7228	N	ASN	B	444	-34.046	109.676	42.942	1.00	47.13	BBBB
ATOM	7229	CA	ASN	B	444	-34.355	109.749	44.366	1.00	45.90	BBBB
ATOM	7230	CB	ASN	B	444	-35.713	109.115	44.632	1.00	44.40	BBBB
ATOM	7231	CG	ASN	B	444	-36.777	109.632	43.702	1.00	44.40	BBBB
ATOM	7232	OD1	ASN	B	444	-36.959	110.840	43.566	1.00	46.06	BBBB
ATOM	7233	ND2	ASN	B	444	-37.492	108.725	43.055	1.00	43.94	BBBB
ATOM	7234	C	ASN	B	444	-33.328	109.082	45.266	1.00	47.00	BBBB
ATOM	7235	O	ASN	B	444	-33.407	109.203	46.477	1.00	49.87	BBBB
ATOM	7236	N	LEU	B	445	-32.363	108.388	44.680	1.00	48.18	BBBB
ATOM	7237	CA	LEU	B	445	-31.348	107.667	45.445	1.00	47.04	BBBB
ATOM	7238	CB	LEU	B	445	-30.498	106.836	44.493	1.00	45.61	BBBB
ATOM	7239	CG	LEU	B	445	-29.698	105.745	45.186	1.00	42.60	BBBB
ATOM	7240	CD1	LEU	B	445	-30.660	104.806	45.872	1.00	43.55	BBBB
ATOM	7241	CD2	LEU	B	445	-28.858	105.010	44.177	1.00	45.05	BBBB
ATOM	7242	C	LEU	B	445	-30.440	108.573	46.255	1.00	47.04	BBBB
ATOM	7243	O	LEU	B	445	-29.846	109.487	45.697	1.00	46.49	BBBB
ATOM	7244	N	CYS	B	446	-30.277	108.283	47.549	1.00	47.40	BBBB
ATOM	7245	CA	CYS	B	446	-29.454	109.141	48.401	1.00	48.48	BBBB
ATOM	7246	C	CYS	B	446	-28.188	108.688	49.130	1.00	48.34	BBBB
ATOM	7247	O	CYS	B	446	-27.424	109.541	49.581	1.00	50.92	BBBB
ATOM	7248	CB	CYS	B	446	-30.339	109.816	49.454	1.00	48.99	BBBB
ATOM	7249	SG	CYS	B	446	-31.109	111.368	48.901	1.00	50.60	BBBB
ATOM	7250	N	TYR	B	447	-27.913	107.402	49.268	1.00	46.98	BBBB
ATOM	7251	CA	TYR	B	447	-26.720	107.074	50.051	1.00	45.51	BBBB
ATOM	7252	CB	TYR	B	447	-27.124	106.292	51.298	1.00	42.08	BBBB
ATOM	7253	CG	TYR	B	447	-28.367	106.818	51.978	1.00	39.46	BBBB
ATOM	7254	CD1	TYR	B	447	-29.629	106.357	51.611	1.00	37.47	BBBB
ATOM	7255	CE1	TYR	B	447	-30.776	106.867	52.196	1.00	35.90	BBBB
ATOM	7256	CD2	TYR	B	447	-28.285	107.808	52.960	1.00	37.08	BBBB
ATOM	7257	CE2	TYR	B	447	-29.423	108.323	53.546	1.00	34.98	BBBB
ATOM	7258	CZ	TYR	B	447	-30.666	107.856	53.161	1.00	36.15	BBBB
ATOM	7259	OH	TYR	B	447	-31.805	108.402	53.712	1.00	37.41	BBBB
ATOM	7260	C	TYR	B	447	-25.579	106.336	49.376	1.00	47.03	BBBB
ATOM	7261	O	TYR	B	447	-24.519	106.173	49.972	1.00	48.22	BBBB
ATOM	7262	N	ALA	B	448	-25.796	105.893	48.143	1.00	45.97	BBBB
ATOM	7263	CA	ALA	B	448	-24.795	105.150	47.405	1.00	43.61	BBBB
ATOM	7264	CB	ALA	B	448	-25.153	105.140	45.923	1.00	42.64	BBBB
ATOM	7265	C	ALA	B	448	-23.379	105.670	47.600	1.00	44.19	BBBB
ATOM	7266	O	ALA	B	448	-22.418	104.905	47.548	1.00	43.70	BBBB
ATOM	7267	N	ASN	B	449	-23.237	106.965	47.845	1.00	45.56	BBBB
ATOM	7268	CA	ASN	B	449	-21.904	107.545	48.007	1.00	48.58	BBBB
ATOM	7269	CB	ASN	B	449	-21.945	109.008	47.609	1.00	50.13	BBBB
ATOM	7270	CG	ASN	B	449	-21.756	109.196	46.139	1.00	53.23	BBBB

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ATOM	7271	OD1	ASN	B	449	-20.660	108.975	45.616	1.00	54.62	BBBB
ATOM	7272	ND2	ASN	B	449	-22.825	109.590	45.445	1.00	56.49	BBBB
ATOM	7273	C	ASN	B	449	-21.213	107.421	49.363	1.00	48.88	BBBB
ATOM	7274	O	ASN	B	449	-20.005	107.632	49.473	1.00	47.37	BBBB
ATOM	7275	N	THR	B	450	-21.982	107.083	50.387	1.00	49.10	BBBB
ATOM	7276	CA	THR	B	450	-21.451	106.959	51.726	1.00	49.93	BBBB
ATOM	7277	CB	THR	B	450	-22.576	107.000	52.748	1.00	49.47	BBBB
ATOM	7278	OG1	THR	B	450	-23.383	105.827	52.601	1.00	49.18	BBBB
ATOM	7279	CG2	THR	B	450	-23.442	108.240	52.540	1.00	47.37	BBBB
ATOM	7280	C	THR	B	450	-20.693	105.654	51.893	1.00	52.04	BBBB
ATOM	7281	O	THR	B	450	-19.857	105.524	52.792	1.00	53.34	BBBB
ATOM	7282	N	ILE	B	451	-20.987	104.682	51.034	1.00	52.31	BBBB
ATOM	7283	CA	ILE	B	451	-20.310	103.392	51.114	1.00	53.02	BBBB
ATOM	7284	CB	ILE	B	451	-21.024	102.299	50.259	1.00	51.69	BBBB
ATOM	7285	CG2	ILE	B	451	-20.033	101.209	49.842	1.00	49.89	BBBB
ATOM	7286	CG1	ILE	B	451	-22.144	101.646	51.062	1.00	50.40	BBBB
ATOM	7287	CD1	ILE	B	451	-23.231	102.564	51.426	1.00	51.17	BBBB
ATOM	7288	C	ILE	B	451	-18.862	103.476	50.655	1.00	54.54	BBBB
ATOM	7289	O	ILE	B	451	-18.512	104.255	49.762	1.00	55.40	BBBB
ATOM	7290	N	ASN	B	452	-18.017	102.673	51.287	1.00	55.00	BBBB
ATOM	7291	CA	ASN	B	452	-16.617	102.614	50.911	1.00	55.14	BBBB
ATOM	7292	CB	ASN	B	452	-15.748	102.414	52.146	1.00	55.75	BBBB
ATOM	7293	CG	ASN	B	452	-14.294	102.254	51.801	1.00	56.98	BBBB
ATOM	7294	OD1	ASN	B	452	-13.732	103.061	51.060	1.00	57.40	BBBB
ATOM	7295	ND2	ASN	B	452	-13.668	101.212	52.337	1.00	57.60	BBBB
ATOM	7296	C	ASN	B	452	-16.535	101.399	49.991	1.00	54.34	BBBB
ATOM	7297	O	ASN	B	452	-16.085	100.332	50.386	1.00	55.32	BBBB
ATOM	7298	N	TRP	B	453	-16.995	101.574	48.761	1.00	52.06	BBBB
ATOM	7299	CA	TRP	B	453	-17.019	100.493	47.797	1.00	50.19	BBBB
ATOM	7300	CB	TRP	B	453	-17.496	101.020	46.441	1.00	46.05	BBBB
ATOM	7301	CG	TRP	B	453	-18.904	101.556	46.490	1.00	42.04	BBBB
ATOM	7302	CD2	TRP	B	453	-20.118	100.802	46.343	1.00	38.00	BBBB
ATOM	7303	CE2	TRP	B	453	-21.192	101.705	46.500	1.00	36.39	BBBB
ATOM	7304	CE3	TRP	B	453	-20.401	99.453	46.094	1.00	37.73	BBBB
ATOM	7305	CD1	TRP	B	453	-19.283	102.848	46.726	1.00	39.59	BBBB
ATOM	7306	NE1	TRP	B	453	-20.653	102.943	46.733	1.00	38.04	BBBB
ATOM	7307	CZ2	TRP	B	453	-22.531	101.305	46.415	1.00	34.14	BBBB
ATOM	7308	CZ3	TRP	B	453	-21.738	99.054	46.009	1.00	37.46	BBBB
ATOM	7309	CH2	TRP	B	453	-22.784	99.982	46.168	1.00	34.45	BBBB
ATOM	7310	C	TRP	B	453	-15.716	99.732	47.641	1.00	51.05	BBBB
ATOM	7311	O	TRP	B	453	-15.730	98.508	47.548	1.00	51.51	BBBB
ATOM	7312	N	LYS	B	454	-14.593	100.440	47.625	1.00	52.52	BBBB
ATOM	7313	CA	LYS	B	454	-13.294	99.789	47.480	1.00	55.18	BBBB
ATOM	7314	CB	LYS	B	454	-12.174	100.837	47.505	1.00	56.46	BBBB
ATOM	7315	CG	LYS	B	454	-12.024	101.587	46.172	1.00	60.95	BBBB
ATOM	7316	CD	LYS	B	454	-11.204	102.865	46.305	1.00	61.51	BBBB
ATOM	7317	CE	LYS	B	454	-11.048	103.565	44.964	0.01	61.57	BBBB
ATOM	7318	NZ	LYS	B	454	-10.356	102.703	43.966	0.01	61.70	BBBB
ATOM	7319	C	LYS	B	454	-13.039	98.710	48.537	1.00	55.30	BBBB
ATOM	7320	O	LYS	B	454	-12.185	97.854	48.364	1.00	55.50	BBBB
ATOM	7321	N	LYS	B	455	-13.792	98.745	49.624	1.00	56.65	BBBB
ATOM	7322	CA	LYS	B	455	-13.634	97.762	50.683	1.00	58.08	BBBB
ATOM	7323	CB	LYS	B	455	-14.327	98.251	51.964	1.00	60.33	BBBB
ATOM	7324	CG	LYS	B	455	-14.247	97.289	53.145	1.00	63.92	BBBB
ATOM	7325	CD	LYS	B	455	-15.343	96.219	53.102	1.00	68.41	BBBB
ATOM	7326	CE	LYS	B	455	-15.041	95.068	54.063	1.00	69.81	BBBB
ATOM	7327	NZ	LYS	B	455	-14.762	95.547	55.462	1.00	72.07	BBBB
ATOM	7328	C	LYS	B	455	-14.228	96.434	50.251	1.00	57.88	BBBB
ATOM	7329	O	LYS	B	455	-13.790	95.377	50.698	1.00	59.14	BBBB
ATOM	7330	N	LEU	B	456	-15.221	96.488	49.371	1.00	57.31	BBBB
ATOM	7331	CA	LEU	B	456	-15.885	95.278	48.907	1.00	55.36	BBBB
ATOM	7332	CB	LEU	B	456	-17.362	95.575	48.640	1.00	55.64	BBBB
ATOM	7333	CG	LEU	B	456	-18.112	96.362	49.717	1.00	55.20	BBBB
ATOM	7334	CD1	LEU	B	456	-19.539	96.614	49.283	1.00	54.18	BBBB
ATOM	7335	CD2	LEU	B	456	-18.088	95.583	51.011	1.00	55.57	BBBB
ATOM	7336	C	LEU	B	456	-15.259	94.693	47.648	1.00	54.10	BBBB
ATOM	7337	O	LEU	B	456	-15.684	93.638	47.188	1.00	53.37	BBBB
ATOM	7338	N	PHE	B	457	-14.246	95.370	47.107	1.00	53.79	BBBB
ATOM	7339	CA	PHE	B	457	-13.584	94.940	45.874	1.00	54.54	BBBB
ATOM	7340	CB	PHE	B	457	-13.117	96.166	45.085	1.00	51.81	BBBB
ATOM	7341	CG	PHE	B	457	-14.234	97.037	44.591	1.00	51.41	BBBB
ATOM	7342	CD1	PHE	B	457	-15.543	96.563	44.540	1.00	51.44	BBBB
ATOM	7343	CD2	PHE	B	457	-13.980	98.333	44.164	1.00	51.62	BBBB
ATOM	7344	CE1	PHE	B	457	-16.579	97.369	44.073	1.00	50.09	BBBB
ATOM	7345	CE2	PHE	B	457	-15.012	99.147	43.695	1.00	51.25	BBBB

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ATOM	7346	CZ	PHE	B	457	-16.311	98.662	43.651	1.00	49.17	BBBB
ATOM	7347	C	PHE	B	457	-12.408	93.972	46.015	1.00	56.25	BBBB
ATOM	7348	O	PHE	B	457	-11.320	94.362	46.433	1.00	57.82	BBBB
ATOM	7349	N	GLY	B	458	-12.616	92.720	45.617	1.00	57.49	BBBB
ATOM	7350	CA	GLY	B	458	-11.557	91.725	45.716	1.00	58.42	BBBB
ATOM	7351	C	GLY	B	458	-10.636	91.566	44.513	1.00	58.86	BBBB
ATOM	7352	O	GLY	B	458	-9.834	90.623	44.471	1.00	57.75	BBBB
ATOM	7353	N	THR	B	459	-10.739	92.477	43.543	1.00	58.80	BBBB
ATOM	7354	CA	THR	B	459	-9.908	92.432	42.335	1.00	58.35	BBBB
ATOM	7355	CB	THR	B	459	-10.701	91.906	41.125	1.00	57.58	BBBB
ATOM	7356	OG1	THR	B	459	-11.169	90.579	41.397	1.00	57.36	BBBB
ATOM	7357	CG2	THR	B	459	-9.824	91.885	39.882	1.00	54.80	BBBB
ATOM	7358	C	THR	B	459	-9.347	93.806	41.962	1.00	59.94	BBBB
ATOM	7359	O	THR	B	459	-10.072	94.799	41.929	1.00	61.14	BBBB
ATOM	7360	N	SER	B	460	-8.051	93.861	41.682	1.00	60.65	BBBB
ATOM	7361	CA	SER	B	460	-7.411	95.119	41.315	1.00	60.37	BBBB
ATOM	7362	CB	SER	B	460	-5.946	94.873	40.956	1.00	61.40	BBBB
ATOM	7363	OG	SER	B	460	-5.844	93.937	39.897	1.00	63.53	BBBB
ATOM	7364	C	SER	B	460	-8.130	95.734	40.124	1.00	58.82	BBBB
ATOM	7365	O	SER	B	460	-8.667	95.019	39.287	1.00	59.11	BBBB
ATOM	7366	N	GLY	B	461	-8.154	97.061	40.060	1.00	57.64	BBBB
ATOM	7367	CA	GLY	B	461	-8.801	97.734	38.949	1.00	56.41	BBBB
ATOM	7368	C	GLY	B	461	-10.256	98.129	39.134	1.00	54.63	BBBB
ATOM	7369	O	GLY	B	461	-10.693	99.151	38.606	1.00	55.38	BBBB
ATOM	7370	N	GLN	B	462	-11.012	97.318	39.865	1.00	52.08	BBBB
ATOM	7371	CA	GLN	B	462	-12.418	97.611	40.100	1.00	50.49	BBBB
ATOM	7372	CB	GLN	B	462	-12.968	96.719	41.219	1.00	48.54	BBBB
ATOM	7373	CG	GLN	B	462	-13.163	95.281	40.809	1.00	47.22	BBBB
ATOM	7374	CD	GLN	B	462	-13.717	94.427	41.916	1.00	48.49	BBBB
ATOM	7375	OE1	GLN	B	462	-13.039	94.141	42.899	1.00	48.79	BBBB
ATOM	7376	NE2	GLN	B	462	-14.964	94.013	41.766	1.00	50.35	BBBB
ATOM	7377	C	GLN	B	462	-12.636	99.076	40.455	1.00	50.22	BBBB
ATOM	7378	O	GLN	B	462	-11.827	99.674	41.166	1.00	50.58	BBBB
ATOM	7379	N	LYS	B	463	-13.717	99.652	39.930	1.00	49.55	BBBB
ATOM	7380	CA	LYS	B	463	-14.063	101.042	40.201	1.00	49.38	BBBB
ATOM	7381	CB	LYS	B	463	-13.447	101.981	39.158	1.00	49.31	BBBB
ATOM	7382	CG	LYS	B	463	-13.784	101.650	37.726	1.00	53.28	BBBB
ATOM	7383	CD	LYS	B	463	-13.312	102.745	36.782	1.00	53.49	BBBB
ATOM	7384	CE	LYS	B	463	-13.528	102.368	35.317	1.00	54.64	BBBB
ATOM	7385	NZ	LYS	B	463	-12.550	101.350	34.833	1.00	53.59	BBBB
ATOM	7386	C	LYS	B	463	-15.569	101.249	40.241	1.00	48.85	BBBB
ATOM	7387	O	LYS	B	463	-16.345	100.368	39.877	1.00	47.16	BBBB
ATOM	7388	N	THR	B	464	-15.978	102.424	40.700	1.00	48.36	BBBB
ATOM	7389	CA	THR	B	464	-17.387	102.737	40.787	1.00	48.52	BBBB
ATOM	7390	CB	THR	B	464	-17.791	103.053	42.240	1.00	47.81	BBBB
ATOM	7391	OG1	THR	B	464	-17.051	104.184	42.713	1.00	48.94	BBBB
ATOM	7392	CG2	THR	B	464	-17.509	101.882	43.125	1.00	45.28	BBBB
ATOM	7393	C	THR	B	464	-17.732	103.935	39.905	1.00	49.64	BBBB
ATOM	7394	O	THR	B	464	-16.867	104.743	39.578	1.00	50.95	BBBB
ATOM	7395	N	LYS	B	465	-18.995	104.017	39.500	1.00	49.53	BBBB
ATOM	7396	CA	LYS	B	465	-19.489	105.122	38.691	1.00	51.45	BBBB
ATOM	7397	CB	LYS	B	465	-19.665	104.708	37.227	1.00	52.92	BBBB
ATOM	7398	CG	LYS	B	465	-19.869	105.884	36.291	1.00	55.59	BBBB
ATOM	7399	CD	LYS	B	465	-19.980	105.436	34.842	1.00	60.53	BBBB
ATOM	7400	CE	LYS	B	465	-19.816	106.607	33.876	1.00	61.32	BBBB
ATOM	7401	NZ	LYS	B	465	-20.875	107.646	34.032	1.00	63.13	BBBB
ATOM	7402	C	LYS	B	465	-20.834	105.387	39.335	1.00	52.11	BBBB
ATOM	7403	O	LYS	B	465	-21.839	104.763	38.999	1.00	56.02	BBBB
ATOM	7404	N	ILE	B	466	-20.842	106.303	40.288	1.00	51.57	BBBB
ATOM	7405	CA	ILE	B	466	-22.043	106.608	41.039	1.00	50.08	BBBB
ATOM	7406	CB	ILE	B	466	-21.809	106.210	42.513	1.00	47.43	BBBB
ATOM	7407	CG2	ILE	B	466	-23.057	106.428	43.346	1.00	47.28	BBBB
ATOM	7408	CG1	ILE	B	466	-21.369	104.742	42.539	1.00	45.83	BBBB
ATOM	7409	CD1	ILE	B	466	-21.066	104.175	43.889	1.00	47.74	BBBB
ATOM	7410	C	ILE	B	466	-22.373	108.078	40.884	1.00	51.01	BBBB
ATOM	7411	O	ILE	B	466	-21.987	108.915	41.695	1.00	52.11	BBBB
ATOM	7412	N	ILE	B	467	-23.097	108.381	39.818	1.00	51.63	BBBB
ATOM	7413	CA	ILE	B	467	-23.458	109.751	39.516	1.00	52.00	BBBB
ATOM	7414	CB	ILE	B	467	-22.531	110.298	38.427	1.00	53.51	BBBB
ATOM	7415	CG2	ILE	B	467	-21.080	110.241	38.906	1.00	54.01	BBBB
ATOM	7416	CG1	ILE	B	467	-22.685	109.454	37.154	1.00	54.74	BBBB
ATOM	7417	CD1	ILE	B	467	-21.770	109.853	36.004	1.00	53.36	BBBB
ATOM	7418	C	ILE	B	467	-24.894	109.874	39.038	1.00	51.30	BBBB
ATOM	7419	O	ILE	B	467	-25.608	108.891	38.916	1.00	51.95	BBBB
ATOM	7420	N	SER	B	468	-25.304	111.107	38.776	1.00	51.70	BBBB

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ATOM	7421	CA	SER	B	468	-26.640	111.414	38.281	1.00	50.54	BBBB
ATOM	7422	CB	SER	B	468	-26.750	111.042	36.811	1.00	49.88	BBBB
ATOM	7423	OG	SER	B	468	-25.686	111.621	36.082	1.00	53.30	BBBB
ATOM	7424	C	SER	B	468	-27.774	110.769	39.030	1.00	49.85	BBBB
ATOM	7425	O	SER	B	468	-28.736	110.322	38.428	1.00	51.47	BBBB
ATOM	7426	N	ASN	B	469	-27.656	110.698	40.344	1.00	50.38	BBBB
ATOM	7427	CA	ASN	B	469	-28.732	110.145	41.163	1.00	50.00	BBBB
ATOM	7428	CB	ASN	B	469	-28.188	109.152	42.199	1.00	48.59	BBBB
ATOM	7429	CG	ASN	B	469	-27.579	107.922	41.563	1.00	46.87	BBBB
ATOM	7430	OD1	ASN	B	469	-28.257	107.173	40.860	1.00	47.34	BBBB
ATOM	7431	ND2	ASN	B	469	-26.287	107.710	41.800	1.00	47.05	BBBB
ATOM	7432	C	ASN	B	469	-29.254	111.397	41.835	1.00	49.03	BBBB
ATOM	7433	O	ASN	B	469	-29.132	112.472	41.264	1.00	49.62	BBBB
ATOM	7434	N	ARG	B	470	-29.826	111.286	43.026	1.00	50.04	BBBB
ATOM	7435	CA	ARG	B	470	-30.313	112.477	43.706	1.00	50.38	BBBB
ATOM	7436	CB	ARG	B	470	-31.335	112.119	44.773	1.00	49.19	BBBB
ATOM	7437	CG	ARG	B	470	-31.951	113.333	45.404	1.00	48.85	BBBB
ATOM	7438	CD	ARG	B	470	-32.967	112.977	46.444	1.00	48.22	BBBB
ATOM	7439	NE	ARG	B	470	-33.347	114.170	47.183	1.00	51.35	BBBB
ATOM	7440	CZ	ARG	B	470	-33.890	114.165	48.395	1.00	52.98	BBBB
ATOM	7441	NH1	ARG	B	470	-34.128	113.020	49.021	1.00	53.52	BBBB
ATOM	7442	NH2	ARG	B	470	-34.183	115.314	48.988	1.00	54.49	BBBB
ATOM	7443	C	ARG	B	470	-29.117	113.162	44.346	1.00	52.04	BBBB
ATOM	7444	O	ARG	B	470	-28.469	112.601	45.224	1.00	54.01	BBBB
ATOM	7445	N	GLY	B	471	-28.825	114.375	43.891	1.00	53.04	BBBB
ATOM	7446	CA	GLY	B	471	-27.687	115.126	44.395	1.00	53.66	BBBB
ATOM	7447	C	GLY	B	471	-27.443	115.130	45.892	1.00	54.38	BBBB
ATOM	7448	O	GLY	B	471	-28.375	115.050	46.699	1.00	54.39	BBBB
ATOM	7449	N	GLU	B	472	-26.168	115.248	46.253	1.00	54.22	BBBB
ATOM	7450	CA	GLU	B	472	-25.735	115.273	47.642	1.00	55.34	BBBB
ATOM	7451	CB	GLU	B	472	-24.211	115.335	47.701	1.00	57.36	BBBB
ATOM	7452	CG	GLU	B	472	-23.542	113.978	47.582	1.00	59.89	BBBB
ATOM	7453	CD	GLU	B	472	-22.391	113.831	48.556	1.00	60.93	BBBB
ATOM	7454	OE1	GLU	B	472	-22.592	114.168	49.747	1.00	59.97	BBBB
ATOM	7455	OE2	GLU	B	472	-21.301	113.376	48.135	1.00	60.54	BBBB
ATOM	7456	C	GLU	B	472	-26.310	116.412	48.476	1.00	54.91	BBBB
ATOM	7457	O	GLU	B	472	-26.837	116.186	49.574	1.00	54.27	BBBB
ATOM	7458	N	ASN	B	473	-26.193	117.632	47.954	1.00	54.39	BBBB
ATOM	7459	CA	ASN	B	473	-26.683	118.828	48.634	1.00	53.66	BBBB
ATOM	7460	CB	ASN	B	473	-26.332	120.067	47.827	1.00	54.51	BBBB
ATOM	7461	CG	ASN	B	473	-24.950	119.996	47.235	1.00	57.57	BBBB
ATOM	7462	OD1	ASN	B	473	-24.667	119.132	46.400	1.00	63.75	BBBB
ATOM	7463	ND2	ASN	B	473	-24.074	120.901	47.655	1.00	58.01	BBBB
ATOM	7464	C	ASN	B	473	-28.190	118.775	48.822	1.00	52.72	BBBB
ATOM	7465	O	ASN	B	473	-28.739	119.411	49.722	1.00	53.34	BBBB
ATOM	7466	N	SER	B	474	-28.855	118.009	47.968	1.00	50.22	BBBB
ATOM	7467	CA	SER	B	474	-30.295	117.875	48.038	1.00	48.71	BBBB
ATOM	7468	CB	SER	B	474	-30.825	117.442	46.674	1.00	47.34	BBBB
ATOM	7469	OG	SER	B	474	-32.226	117.562	46.610	1.00	43.65	BBBB
ATOM	7470	C	SER	B	474	-30.636	116.843	49.107	1.00	50.12	BBBB
ATOM	7471	O	SER	B	474	-31.586	117.010	49.872	1.00	49.98	BBBB
ATOM	7472	N	CYS	B	475	-29.852	115.771	49.170	1.00	51.42	BBBB
ATOM	7473	CA	CYS	B	475	-30.099	114.731	50.171	1.00	51.25	BBBB
ATOM	7474	C	CYS	B	475	-29.889	115.291	51.580	1.00	50.47	BBBB
ATOM	7475	O	CYS	B	475	-30.660	114.974	52.493	1.00	49.09	BBBB
ATOM	7476	CB	CYS	B	475	-29.186	113.507	49.938	1.00	50.50	BBBB
ATOM	7477	SG	CYS	B	475	-29.533	112.554	48.418	1.00	49.18	BBBB
ATOM	7478	N	LYS	B	476	-28.853	116.120	51.754	1.00	49.72	BBBB
ATOM	7479	CA	LYS	B	476	-28.574	116.728	53.058	1.00	49.52	BBBB
ATOM	7480	CB	LYS	B	476	-27.270	117.521	53.038	1.00	50.33	BBBB
ATOM	7481	CG	LYS	B	476	-26.024	116.686	52.847	1.00	54.29	BBBB
ATOM	7482	CD	LYS	B	476	-24.760	117.530	52.973	1.00	54.77	BBBB
ATOM	7483	CE	LYS	B	476	-24.687	118.197	54.347	1.00	55.80	BBBB
ATOM	7484	NZ	LYS	B	476	-23.339	118.784	54.619	1.00	56.69	BBBB
ATOM	7485	C	LYS	B	476	-29.694	117.670	53.480	1.00	49.74	BBBB
ATOM	7486	O	LYS	B	476	-30.162	117.600	54.615	1.00	49.02	BBBB
ATOM	7487	N	ALA	B	477	-30.115	118.541	52.559	1.00	49.79	BBBB
ATOM	7488	CA	ALA	B	477	-31.172	119.527	52.803	1.00	50.12	BBBB
ATOM	7489	CB	ALA	B	477	-31.527	120.241	51.507	1.00	49.05	BBBB
ATOM	7490	C	ALA	B	477	-32.429	118.942	53.436	1.00	51.38	BBBB
ATOM	7491	O	ALA	B	477	-33.035	119.570	54.303	1.00	52.04	BBBB
ATOM	7492	N	THR	B	478	-32.834	117.755	52.997	1.00	52.13	BBBB
ATOM	7493	CA	THR	B	478	-34.009	117.110	53.571	1.00	54.26	BBBB
ATOM	7494	CB	THR	B	478	-34.821	116.348	52.519	1.00	55.62	BBBB
ATOM	7495	OG1	THR	B	478	-34.040	116.189	51.331	1.00	58.94	BBBB

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ATOM	7496	CG2	THR	B	478	-36.088	117.089	52.199	1.00	57.20	BBBB
ATOM	7497	C	THR	B	478	-33.567	116.121	54.642	1.00	54.84	BBBB
ATOM	7498	O	THR	B	478	-34.321	115.229	55.036	1.00	55.03	BBBB
ATOM	7499	N	GLY	B	479	-32.331	116.284	55.103	1.00	54.31	BBBB
ATOM	7500	CA	GLY	B	479	-31.801	115.421	56.138	1.00	54.32	BBBB
ATOM	7501	C	GLY	B	479	-31.894	113.954	55.790	1.00	55.21	BBBB
ATOM	7502	O	GLY	B	479	-32.626	113.199	56.429	1.00	54.15	BBBB
ATOM	7503	N	GLN	B	480	-31.161	113.550	54.760	1.00	55.42	BBBB
ATOM	7504	CA	GLN	B	480	-31.162	112.161	54.341	1.00	56.09	BBBB
ATOM	7505	CB	GLN	B	480	-32.009	111.969	53.087	1.00	57.43	BBBB
ATOM	7506	CG	GLN	B	480	-33.376	112.601	53.231	1.00	61.13	BBBB
ATOM	7507	CD	GLN	B	480	-34.436	111.878	52.452	1.00	64.12	BBBB
ATOM	7508	OE1	GLN	B	480	-35.591	112.299	52.433	1.00	65.51	BBBB
ATOM	7509	NE2	GLN	B	480	-34.058	110.774	51.805	1.00	65.31	BBBB
ATOM	7510	C	GLN	B	480	-29.730	111.752	54.099	1.00	55.09	BBBB
ATOM	7511	O	GLN	B	480	-29.296	111.484	52.972	1.00	54.83	BBBB
ATOM	7512	N	VAL	B	481	-29.001	111.757	55.202	1.00	52.42	BBBB
ATOM	7513	CA	VAL	B	481	-27.616	111.372	55.244	1.00	49.85	BBBB
ATOM	7514	CB	VAL	B	481	-26.756	112.468	55.917	1.00	52.52	BBBB
ATOM	7515	CG1	VAL	B	481	-26.536	113.635	54.951	1.00	51.46	BBBB
ATOM	7516	CG2	VAL	B	481	-27.448	112.971	57.194	1.00	50.56	BBBB
ATOM	7517	C	VAL	B	481	-27.701	110.147	56.131	1.00	48.80	BBBB
ATOM	7518	O	VAL	B	481	-28.791	109.776	56.562	1.00	46.41	BBBB
ATOM	7519	N	CYS	B	482	-26.572	109.512	56.404	1.00	48.86	BBBB
ATOM	7520	CA	CYS	B	482	-26.582	108.334	57.256	1.00	47.97	BBBB
ATOM	7521	C	CYS	B	482	-26.925	108.707	58.689	1.00	48.89	BBBB
ATOM	7522	O	CYS	B	482	-26.572	109.789	59.160	1.00	49.63	BBBB
ATOM	7523	CB	CYS	B	482	-25.223	107.646	57.209	1.00	47.80	BBBB
ATOM	7524	SG	CYS	B	482	-24.849	106.908	55.589	1.00	47.91	BBBB
ATOM	7525	N	HIS	B	483	-27.615	107.806	59.378	1.00	49.15	BBBB
ATOM	7526	CA	HIS	B	483	-28.007	108.014	60.768	1.00	50.49	BBBB
ATOM	7527	CB	HIS	B	483	-28.660	106.740	61.296	1.00	50.71	BBBB
ATOM	7528	CG	HIS	B	483	-29.343	106.896	62.620	1.00	50.95	BBBB
ATOM	7529	CD2	HIS	B	483	-30.648	106.777	62.965	1.00	49.32	BBBB
ATOM	7530	ND1	HIS	B	483	-28.657	107.144	63.791	1.00	50.25	BBBB
ATOM	7531	CE1	HIS	B	483	-29.510	107.165	64.799	1.00	50.71	BBBB
ATOM	7532	NE2	HIS	B	483	-30.724	106.944	64.326	1.00	50.21	BBBB
ATOM	7533	C	HIS	B	483	-26.808	108.389	61.651	1.00	52.84	BBBB
ATOM	7534	O	HIS	B	483	-25.648	108.245	61.252	1.00	51.63	BBBB
ATOM	7535	N	ALA	B	484	-27.095	108.876	62.855	1.00	55.11	BBBB
ATOM	7536	CA	ALA	B	484	-26.043	109.273	63.782	1.00	55.52	BBBB
ATOM	7537	CB	ALA	B	484	-26.641	110.045	64.941	1.00	56.68	BBBB
ATOM	7538	C	ALA	B	484	-25.293	108.052	64.297	1.00	55.34	BBBB
ATOM	7539	O	ALA	B	484	-24.084	108.106	64.541	1.00	54.89	BBBB
ATOM	7540	N	LEU	B	485	-26.015	106.949	64.452	1.00	54.90	BBBB
ATOM	7541	CA	LEU	B	485	-25.417	105.709	64.930	1.00	56.32	BBBB
ATOM	7542	CB	LEU	B	485	-26.518	104.709	65.313	1.00	53.86	BBBB
ATOM	7543	CG	LEU	B	485	-27.330	105.112	66.546	1.00	52.18	BBBB
ATOM	7544	CD1	LEU	B	485	-28.559	104.252	66.699	1.00	51.29	BBBB
ATOM	7545	CD2	LEU	B	485	-26.438	105.002	67.765	1.00	51.47	BBBB
ATOM	7546	C	LEU	B	485	-24.478	105.074	63.908	1.00	58.34	BBBB
ATOM	7547	O	LEU	B	485	-23.791	104.114	64.224	1.00	59.16	BBBB
ATOM	7548	N	CYS	B	486	-24.449	105.605	62.687	1.00	61.47	BBBB
ATOM	7549	CA	CYS	B	486	-23.594	105.057	61.636	1.00	64.37	BBBB
ATOM	7550	C	CYS	B	486	-22.249	105.736	61.576	1.00	66.24	BBBB
ATOM	7551	O	CYS	B	486	-21.558	105.612	60.568	1.00	67.88	BBBB
ATOM	7552	CB	CYS	B	486	-24.210	105.226	60.245	1.00	63.26	BBBB
ATOM	7553	SG	CYS	B	486	-25.783	104.411	59.872	1.00	65.08	BBBB
ATOM	7554	N	SER	B	487	-21.875	106.457	62.623	1.00	68.67	BBBB
ATOM	7555	CA	SER	B	487	-20.590	107.161	62.641	1.00	72.24	BBBB
ATOM	7556	CB	SER	B	487	-20.001	107.137	64.069	1.00	74.42	BBBB
ATOM	7557	OG	SER	B	487	-18.970	108.103	64.251	1.00	75.71	BBBB
ATOM	7558	C	SER	B	487	-19.575	106.580	61.624	1.00	73.42	BBBB
ATOM	7559	O	SER	B	487	-18.911	107.330	60.905	1.00	75.18	BBBB
ATOM	7560	N	PRO	B	488	-19.456	105.238	61.545	1.00	72.72	BBBB
ATOM	7561	CD	PRO	B	488	-20.079	104.261	62.461	1.00	73.49	BBBB
ATOM	7562	CA	PRO	B	488	-18.543	104.542	60.636	1.00	72.14	BBBB
ATOM	7563	CB	PRO	B	488	-19.048	103.106	60.702	1.00	72.72	BBBB
ATOM	7564	CG	PRO	B	488	-19.348	102.967	62.129	1.00	74.28	BBBB
ATOM	7565	C	PRO	B	488	-18.376	105.013	59.187	1.00	71.52	BBBB
ATOM	7566	O	PRO	B	488	-18.014	106.164	58.913	1.00	69.00	BBBB
ATOM	7567	N	GLU	B	489	-18.623	104.074	58.270	1.00	70.83	BBBB
ATOM	7568	CA	GLU	B	489	-18.477	104.301	56.841	1.00	68.87	BBBB
ATOM	7569	CB	GLU	B	489	-17.429	103.346	56.263	1.00	71.70	BBBB
ATOM	7570	CG	GLU	B	489	-16.193	103.114	57.111	1.00	74.13	BBBB

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ATOM	7571	CD	GLU	B	489	-15.182	102.214	56.408	1.00	76.18	BBBB
ATOM	7572	OE1	GLU	B	489	-15.545	101.071	56.047	1.00	76.42	BBBB
ATOM	7573	OE2	GLU	B	489	-14.027	102.654	56.214	1.00	76.82	BBBB
ATOM	7574	C	GLU	B	489	-19.760	104.121	56.032	1.00	66.15	BBBB
ATOM	7575	O	GLU	B	489	-19.997	103.060	55.450	1.00	66.94	BBBB
ATOM	7576	N	GLY	B	490	-20.586	105.152	55.992	1.00	61.95	BBBB
ATOM	7577	CA	GLY	B	490	-21.790	105.075	55.198	1.00	56.89	BBBB
ATOM	7578	C	GLY	B	490	-22.897	104.168	55.665	1.00	52.71	BBBB
ATOM	7579	O	GLY	B	490	-22.821	103.549	56.717	1.00	51.95	BBBB
ATOM	7580	N	CYS	B	491	-23.932	104.089	54.841	1.00	50.86	BBBB
ATOM	7581	CA	CYS	B	491	-25.104	103.292	55.141	1.00	49.28	BBBB
ATOM	7582	C	CYS	B	491	-25.811	102.917	53.845	1.00	47.67	BBBB
ATOM	7583	O	CYS	B	491	-25.435	103.368	52.781	1.00	48.91	BBBB
ATOM	7584	CB	CYS	B	491	-26.038	104.115	56.017	1.00	49.56	BBBB
ATOM	7585	SG	CYS	B	491	-26.466	105.716	55.262	1.00	48.28	BBBB
ATOM	7586	N	TRP	B	492	-26.840	102.094	53.945	1.00	46.64	BBBB
ATOM	7587	CA	TRP	B	492	-27.598	101.669	52.778	1.00	45.99	BBBB
ATOM	7588	CB	TRP	B	492	-27.667	100.141	52.717	1.00	44.98	BBBB
ATOM	7589	CG	TRP	B	492	-26.331	99.512	52.620	1.00	44.70	BBBB
ATOM	7590	CD2	TRP	B	492	-25.546	99.354	51.433	1.00	45.59	BBBB
ATOM	7591	CE2	TRP	B	492	-24.305	98.787	51.824	1.00	47.09	BBBB
ATOM	7592	CE3	TRP	B	492	-25.765	99.636	50.077	1.00	42.87	BBBB
ATOM	7593	CD1	TRP	B	492	-25.567	99.044	53.651	1.00	46.48	BBBB
ATOM	7594	NE1	TRP	B	492	-24.347	98.608	53.183	1.00	46.99	BBBB
ATOM	7595	CZ2	TRP	B	492	-23.286	98.498	50.903	1.00	45.29	BBBB
ATOM	7596	CZ3	TRP	B	492	-24.757	99.350	49.166	1.00	44.67	BBBB
ATOM	7597	CH2	TRP	B	492	-23.529	98.786	49.584	1.00	44.99	BBBB
ATOM	7598	C	TRP	B	492	-28.995	102.246	52.903	1.00	45.90	BBBB
ATOM	7599	O	TRP	B	492	-29.891	101.948	52.112	1.00	44.61	BBBB
ATOM	7600	N	GLY	B	493	-29.169	103.083	53.914	1.00	45.82	BBBB
ATOM	7601	CA	GLY	B	493	-30.464	103.677	54.143	1.00	45.93	BBBB
ATOM	7602	C	GLY	B	493	-30.378	104.707	55.238	1.00	46.14	BBBB
ATOM	7603	O	GLY	B	493	-29.287	105.060	55.676	1.00	46.37	BBBB
ATOM	7604	N	PRO	B	494	-31.525	105.228	55.683	1.00	46.04	BBBB
ATOM	7605	CD	PRO	B	494	-32.822	105.161	54.986	1.00	43.99	BBBB
ATOM	7606	CA	PRO	B	494	-31.569	106.232	56.742	1.00	46.43	BBBB
ATOM	7607	CB	PRO	B	494	-32.790	107.052	56.353	1.00	43.99	BBBB
ATOM	7608	CG	PRO	B	494	-33.717	105.992	55.881	1.00	42.19	BBBB
ATOM	7609	C	PRO	B	494	-31.693	105.624	58.153	1.00	47.77	BBBB
ATOM	7610	O	PRO	B	494	-31.217	106.211	59.130	1.00	47.63	BBBB
ATOM	7611	N	GLU	B	495	-32.334	104.459	58.256	1.00	47.59	BBBB
ATOM	7612	CA	GLU	B	495	-32.520	103.807	59.551	1.00	48.39	BBBB
ATOM	7613	CB	GLU	B	495	-33.488	102.610	59.413	1.00	44.72	BBBB
ATOM	7614	CG	GLU	B	495	-34.829	102.992	58.764	1.00	43.90	BBBB
ATOM	7615	CD	GLU	B	495	-35.947	101.959	58.947	1.00	44.75	BBBB
ATOM	7616	OE1	GLU	B	495	-36.868	102.210	59.757	1.00	45.50	BBBB
ATOM	7617	OE2	GLU	B	495	-35.924	100.900	58.283	1.00	43.71	BBBB
ATOM	7618	C	GLU	B	495	-31.169	103.377	60.159	1.00	50.30	BBBB
ATOM	7619	O	GLU	B	495	-30.137	103.342	59.475	1.00	50.43	BBBB
ATOM	7620	N	PRO	B	496	-31.153	103.087	61.467	1.00	51.54	BBBB
ATOM	7621	CD	PRO	B	496	-32.217	103.376	62.443	1.00	52.26	BBBB
ATOM	7622	CA	PRO	B	496	-29.924	102.670	62.152	1.00	52.69	BBBB
ATOM	7623	CB	PRO	B	496	-30.354	102.602	63.614	1.00	52.84	BBBB
ATOM	7624	CG	PRO	B	496	-31.426	103.643	63.698	1.00	52.52	BBBB
ATOM	7625	C	PRO	B	496	-29.323	101.344	61.671	1.00	53.26	BBBB
ATOM	7626	O	PRO	B	496	-28.097	101.192	61.609	1.00	52.67	BBBB
ATOM	7627	N	ARG	B	497	-30.181	100.387	61.326	1.00	52.91	BBBB
ATOM	7628	CA	ARG	B	497	-29.689	99.094	60.885	1.00	52.78	BBBB
ATOM	7629	CB	ARG	B	497	-30.766	98.013	61.039	1.00	54.40	BBBB
ATOM	7630	CG	ARG	B	497	-31.847	97.943	59.988	1.00	55.84	BBBB
ATOM	7631	CD	ARG	B	497	-31.998	96.486	59.548	1.00	58.15	BBBB
ATOM	7632	NE	ARG	B	497	-33.331	96.130	59.058	1.00	62.06	BBBB
ATOM	7633	CZ	ARG	B	497	-34.046	96.840	58.187	1.00	64.17	BBBB
ATOM	7634	NH1	ARG	B	497	-33.567	97.980	57.690	1.00	66.67	BBBB
ATOM	7635	NH2	ARG	B	497	-35.238	96.399	57.798	1.00	63.23	BBBB
ATOM	7636	C	ARG	B	497	-29.138	99.082	59.477	1.00	52.48	BBBB
ATOM	7637	O	ARG	B	497	-28.590	98.076	59.039	1.00	53.32	BBBB
ATOM	7638	N	ASP	B	498	-29.269	100.191	58.762	1.00	52.68	BBBB
ATOM	7639	CA	ASP	B	498	-28.735	100.243	57.409	1.00	52.29	BBBB
ATOM	7640	CB	ASP	B	498	-29.488	101.260	56.543	1.00	51.13	BBBB
ATOM	7641	CG	ASP	B	498	-30.991	101.054	56.561	1.00	52.92	BBBB
ATOM	7642	OD1	ASP	B	498	-31.440	99.883	56.570	1.00	53.33	BBBB
ATOM	7643	OD2	ASP	B	498	-31.726	102.070	56.552	1.00	52.39	BBBB
ATOM	7644	C	ASP	B	498	-27.265	100.636	57.487	1.00	53.23	BBBB
ATOM	7645	O	ASP	B	498	-26.610	100.787	56.462	1.00	52.91	BBBB

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ATOM	7646	N	CYS	B	499	-26.750	100.809	58.705	1.00	54.96	BBBB
ATOM	7647	CA	CYS	B	499	-25.348	101.186	58.897	1.00	57.42	BBBB
ATOM	7648	C	CYS	B	499	-24.448	100.031	58.447	1.00	58.47	BBBB
ATOM	7649	O	CYS	B	499	-24.910	98.903	58.309	1.00	58.45	BBBB
ATOM	7650	CB	CYS	B	499	-25.059	101.498	60.380	1.00	59.92	BBBB
ATOM	7651	SG	CYS	B	499	-25.941	102.890	61.196	1.00	60.05	BBBB
ATOM	7652	N	VAL	B	500	-23.170	100.305	58.204	1.00	60.63	BBBB
ATOM	7653	CA	VAL	B	500	-22.254	99.244	57.795	1.00	64.38	BBBB
ATOM	7654	CB	VAL	B	500	-21.221	99.740	56.735	1.00	64.47	BBBB
ATOM	7655	CG1	VAL	B	500	-21.949	100.423	55.588	1.00	63.63	BBBB
ATOM	7656	CG2	VAL	B	500	-20.218	100.683	57.359	1.00	65.65	BBBB
ATOM	7657	C	VAL	B	500	-21.530	98.720	59.038	1.00	66.95	BBBB
ATOM	7658	O	VAL	B	500	-21.435	97.512	59.253	1.00	67.69	BBBB
ATOM	7659	N	SER	B	501	-21.035	99.640	59.862	1.00	70.01	BBBB
ATOM	7660	CA	SER	B	501	-20.352	99.285	61.101	1.00	71.76	BBBB
ATOM	7661	CB	SER	B	501	-18.873	99.679	61.036	1.00	71.82	BBBB
ATOM	7662	OG	SER	B	501	-18.161	98.861	60.124	1.00	73.69	BBBB
ATOM	7663	C	SER	B	501	-21.032	100.026	62.250	1.00	73.29	BBBB
ATOM	7664	OT1	SER	B	501	-21.833	100.938	61.951	1.00	73.50	BBBB
ATOM	7665	OT2	SER	B	501	-20.759	99.697	63.427	1.00	75.50	BBBB
ATOM	7666	CB	ALA	C	2	34.368	26.190	33.761	1.00	85.67	CCCC
ATOM	7667	C	ALA	C	2	36.630	27.249	33.541	1.00	85.50	CCCC
ATOM	7668	O	ALA	C	2	37.681	27.721	33.983	1.00	86.40	CCCC
ATOM	7669	N	ALA	C	2	35.540	27.073	35.756	1.00	85.68	CCCC
ATOM	7670	CA	ALA	C	2	35.724	26.405	34.434	1.00	85.79	CCCC
ATOM	7671	N	SER	C	3	36.233	27.439	32.285	1.00	83.91	CCCC
ATOM	7672	CA	SER	C	3	37.036	28.234	31.364	1.00	81.60	CCCC
ATOM	7673	CB	SER	C	3	36.918	27.685	29.939	1.00	81.67	CCCC
ATOM	7674	OG	SER	C	3	37.948	28.196	29.112	1.00	81.47	CCCC
ATOM	7675	C	SER	C	3	36.552	29.678	31.419	1.00	79.57	CCCC
ATOM	7676	O	SER	C	3	37.354	30.607	31.458	1.00	79.56	CCCC
ATOM	7677	N	HIS	C	4	35.236	29.858	31.430	1.00	77.17	CCCC
ATOM	7678	CA	HIS	C	4	34.636	31.187	31.499	1.00	74.71	CCCC
ATOM	7679	CB	HIS	C	4	33.167	31.147	31.061	1.00	73.43	CCCC
ATOM	7680	CG	HIS	C	4	32.952	31.383	29.601	1.00	72.44	CCCC
ATOM	7681	CD2	HIS	C	4	32.392	30.604	28.646	1.00	72.64	CCCC
ATOM	7682	ND1	HIS	C	4	33.305	32.560	28.977	1.00	72.03	CCCC
ATOM	7683	CE1	HIS	C	4	32.971	32.495	27.700	1.00	72.10	CCCC
ATOM	7684	NE2	HIS	C	4	32.416	31.318	27.473	1.00	72.16	CCCC
ATOM	7685	C	HIS	C	4	34.677	31.675	32.935	1.00	74.14	CCCC
ATOM	7686	O	HIS	C	4	34.510	32.866	33.201	1.00	74.16	CCCC
ATOM	7687	N	PHE	C	5	34.901	30.752	33.863	1.00	73.11	CCCC
ATOM	7688	CA	PHE	C	5	34.900	31.112	35.270	1.00	73.13	CCCC
ATOM	7689	CB	PHE	C	5	33.727	30.417	35.972	1.00	71.83	CCCC
ATOM	7690	CG	PHE	C	5	32.531	30.201	35.081	1.00	70.33	CCCC
ATOM	7691	CD1	PHE	C	5	32.424	29.047	34.308	1.00	68.80	CCCC
ATOM	7692	CD2	PHE	C	5	31.538	31.177	34.973	1.00	69.68	CCCC
ATOM	7693	CE1	PHE	C	5	31.350	28.871	33.439	1.00	67.89	CCCC
ATOM	7694	CE2	PHE	C	5	30.464	31.010	34.108	1.00	67.57	CCCC
ATOM	7695	CZ	PHE	C	5	30.369	29.857	33.340	1.00	67.39	CCCC
ATOM	7696	C	PHE	C	5	36.185	30.809	36.021	1.00	74.23	CCCC
ATOM	7697	O	PHE	C	5	37.143	30.275	35.469	1.00	74.56	CCCC
ATOM	7698	N	ASN	C	6	36.184	31.168	37.297	1.00	75.75	CCCC
ATOM	7699	CA	ASN	C	6	37.317	30.955	38.182	1.00	76.84	CCCC
ATOM	7700	CB	ASN	C	6	38.397	32.010	37.927	1.00	77.88	CCCC
ATOM	7701	CG	ASN	C	6	39.686	31.733	38.686	1.00	78.18	CCCC
ATOM	7702	OD1	ASN	C	6	40.638	32.507	38.605	1.00	78.96	CCCC
ATOM	7703	ND2	ASN	C	6	39.726	30.626	39.422	1.00	77.65	CCCC
ATOM	7704	C	ASN	C	6	36.779	31.101	39.594	1.00	77.72	CCCC
ATOM	7705	O	ASN	C	6	35.653	31.567	39.789	1.00	77.34	CCCC
ATOM	7706	N	ASP	C	7	37.577	30.706	40.579	1.00	78.80	CCCC
ATOM	7707	CA	ASP	C	7	37.153	30.809	41.966	1.00	78.72	CCCC
ATOM	7708	CB	ASP	C	7	38.303	30.479	42.922	1.00	82.27	CCCC
ATOM	7709	CG	ASP	C	7	38.513	28.985	43.084	1.00	84.79	CCCC
ATOM	7710	OD1	ASP	C	7	37.553	28.288	43.483	1.00	85.89	CCCC
ATOM	7711	OD2	ASP	C	7	39.637	28.510	42.814	1.00	87.43	CCCC
ATOM	7712	C	ASP	C	7	36.598	32.182	42.293	1.00	76.61	CCCC
ATOM	7713	O	ASP	C	7	36.672	33.123	41.502	1.00	75.51	CCCC
ATOM	7714	N	CYS	C	8	36.055	32.284	43.490	1.00	74.90	CCCC
ATOM	7715	CA	CYS	C	8	35.441	33.506	43.938	1.00	74.35	CCCC
ATOM	7716	C	CYS	C	8	35.911	33.778	45.364	1.00	75.50	CCCC
ATOM	7717	O	CYS	C	8	35.809	32.917	46.232	1.00	75.99	CCCC
ATOM	7718	CB	CYS	C	8	33.935	33.295	43.864	1.00	70.95	CCCC
ATOM	7719	SG	CYS	C	8	32.894	34.711	44.270	1.00	71.46	CCCC
ATOM	7720	N	PRO	C	9	36.463	34.972	45.620	1.00	77.32	CCCC

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ATOM	7721	CD	PRO	C	9	36.584	36.144	44.737	1.00	77.60	CCCC
ATOM	7722	CA	PRO	C	9	36.933	35.282	46.974	1.00	79.25	CCCC
ATOM	7723	CB	PRO	C	9	37.523	36.679	46.819	1.00	78.78	CCCC
ATOM	7724	CG	PRO	C	9	36.685	37.276	45.730	1.00	78.75	CCCC
ATOM	7725	C	PRO	C	9	35.793	35.228	47.989	1.00	81.95	CCCC
ATOM	7726	O	PRO	C	9	34.955	36.132	48.048	1.00	82.64	CCCC
ATOM	7727	N	ASP	C	10	35.770	34.164	48.789	1.00	84.32	CCCC
ATOM	7728	CA	ASP	C	10	34.721	33.971	49.790	1.00	86.71	CCCC
ATOM	7729	CB	ASP	C	10	34.739	32.518	50.302	1.00	87.60	CCCC
ATOM	7730	CG	ASP	C	10	36.073	32.119	50.920	1.00	88.03	CCCC
ATOM	7731	OD1	ASP	C	10	37.126	32.426	50.320	1.00	87.70	CCCC
ATOM	7732	OD2	ASP	C	10	36.063	31.482	51.998	1.00	87.81	CCCC
ATOM	7733	C	ASP	C	10	34.759	34.948	50.966	1.00	87.30	CCCC
ATOM	7734	O	ASP	C	10	35.514	34.768	51.923	1.00	87.79	CCCC
ATOM	7735	N	ALA	C	11	33.927	35.984	50.884	1.00	87.71	CCCC
ATOM	7736	CA	ALA	C	11	33.848	36.996	51.933	1.00	88.29	CCCC
ATOM	7737	CB	ALA	C	11	33.151	38.245	51.403	1.00	87.90	CCCC
ATOM	7738	C	ALA	C	11	33.093	36.446	53.141	1.00	88.06	CCCC
ATOM	7739	O	ALA	C	11	32.532	35.348	53.084	1.00	88.67	CCCC
ATOM	7740	N	HIS	C	12	33.086	37.205	54.234	1.00	86.97	CCCC
ATOM	7741	CA	HIS	C	12	32.388	36.780	55.442	1.00	85.27	CCCC
ATOM	7742	CB	HIS	C	12	32.645	37.771	56.580	1.00	89.09	CCCC
ATOM	7743	CG	HIS	C	12	34.022	37.667	57.163	1.00	92.34	CCCC
ATOM	7744	CD2	HIS	C	12	34.439	37.387	58.421	1.00	93.62	CCCC
ATOM	7745	ND1	HIS	C	12	35.164	37.840	56.410	1.00	93.97	CCCC
ATOM	7746	CE1	HIS	C	12	36.226	37.669	57.178	1.00	94.28	CCCC
ATOM	7747	NE2	HIS	C	12	35.814	37.393	58.403	1.00	94.39	CCCC
ATOM	7748	C	HIS	C	12	30.893	36.642	55.160	1.00	81.69	CCCC
ATOM	7749	O	HIS	C	12	30.273	35.651	55.555	1.00	81.40	CCCC
ATOM	7750	N	THR	C	13	30.316	37.635	54.483	1.00	76.55	CCCC
ATOM	7751	CA	THR	C	13	28.905	37.581	54.108	1.00	70.27	CCCC
ATOM	7752	CB	THR	C	13	28.234	38.963	54.151	1.00	71.03	CCCC
ATOM	7753	OG1	THR	C	13	29.008	39.889	53.384	1.00	71.60	CCCC
ATOM	7754	CG2	THR	C	13	28.107	39.456	55.578	1.00	70.29	CCCC
ATOM	7755	C	THR	C	13	28.893	37.072	52.673	1.00	66.10	CCCC
ATOM	7756	O	THR	C	13	29.607	37.593	51.820	1.00	64.36	CCCC
ATOM	7757	N	GLN	C	14	28.087	36.047	52.417	1.00	62.09	CCCC
ATOM	7758	CA	GLN	C	14	28.009	35.439	51.092	1.00	57.13	CCCC
ATOM	7759	CB	GLN	C	14	27.251	34.105	51.183	1.00	58.37	CCCC
ATOM	7760	CG	GLN	C	14	25.784	34.219	51.632	1.00	57.77	CCCC
ATOM	7761	CD	GLN	C	14	25.204	32.889	52.111	1.00	57.44	CCCC
ATOM	7762	OE1	GLN	C	14	25.362	31.851	51.462	1.00	57.93	CCCC
ATOM	7763	NE2	GLN	C	14	24.521	32.921	53.247	1.00	56.10	CCCC
ATOM	7764	C	GLN	C	14	27.379	36.328	50.022	1.00	52.85	CCCC
ATOM	7765	O	GLN	C	14	26.513	37.148	50.309	1.00	50.57	CCCC
ATOM	7766	N	PHE	C	15	27.843	36.161	48.787	1.00	49.71	CCCC
ATOM	7767	CA	PHE	C	15	27.325	36.919	47.660	1.00	47.37	CCCC
ATOM	7768	CB	PHE	C	15	28.358	36.979	46.544	1.00	45.08	CCCC
ATOM	7769	CG	PHE	C	15	27.980	37.903	45.426	1.00	43.63	CCCC
ATOM	7770	CD1	PHE	C	15	27.621	39.218	45.690	1.00	42.03	CCCC
ATOM	7771	CD2	PHE	C	15	27.970	37.459	44.112	1.00	42.01	CCCC
ATOM	7772	CE1	PHE	C	15	27.253	40.080	44.666	1.00	41.49	CCCC
ATOM	7773	CE2	PHE	C	15	27.604	38.311	43.083	1.00	43.16	CCCC
ATOM	7774	CZ	PHE	C	15	27.243	39.633	43.363	1.00	42.24	CCCC
ATOM	7775	C	PHE	C	15	26.052	36.237	47.150	1.00	46.41	CCCC
ATOM	7776	O	PHE	C	15	25.052	36.899	46.856	1.00	44.93	CCCC
ATOM	7777	N	CYS	C	16	26.107	34.913	47.057	1.00	43.06	CCCC
ATOM	7778	CA	CYS	C	16	24.975	34.122	46.624	1.00	42.54	CCCC
ATOM	7779	C	CYS	C	16	24.342	33.467	47.837	1.00	42.96	CCCC
ATOM	7780	O	CYS	C	16	24.869	32.504	48.387	1.00	44.28	CCCC
ATOM	7781	CB	CYS	C	16	25.418	33.049	45.646	1.00	42.95	CCCC
ATOM	7782	SG	CYS	C	16	26.407	33.706	44.278	1.00	45.55	CCCC
ATOM	7783	N	PHE	C	17	23.196	33.990	48.246	1.00	42.28	CCCC
ATOM	7784	CA	PHE	C	17	22.502	33.473	49.400	1.00	40.53	CCCC
ATOM	7785	CB	PHE	C	17	21.265	34.307	49.645	1.00	39.52	CCCC
ATOM	7786	CG	PHE	C	17	21.538	35.768	49.729	1.00	38.55	CCCC
ATOM	7787	CD1	PHE	C	17	22.131	36.316	50.861	1.00	37.95	CCCC
ATOM	7788	CD2	PHE	C	17	21.191	36.610	48.684	1.00	39.76	CCCC
ATOM	7789	CE1	PHE	C	17	22.373	37.685	50.952	1.00	35.64	CCCC
ATOM	7790	CE2	PHE	C	17	21.431	37.987	48.766	1.00	39.34	CCCC
ATOM	7791	CZ	PHE	C	17	22.022	38.518	49.904	1.00	37.99	CCCC
ATOM	7792	C	PHE	C	17	22.119	32.010	49.298	1.00	41.94	CCCC
ATOM	7793	O	PHE	C	17	22.137	31.300	50.297	1.00	44.58	CCCC
ATOM	7794	N	HIS	C	18	21.762	31.540	48.110	1.00	42.38	CCCC
ATOM	7795	CA	HIS	C	18	21.371	30.136	47.980	1.00	42.88	CCCC

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ATOM	7796	CB	HIS	C	18	19.848	29.998	48.036	1.00	41.44	CCCC
ATOM	7797	CG	HIS	C	18	19.230	30.626	49.248	1.00	42.01	CCCC
ATOM	7798	CD2	HIS	C	18	18.720	31.867	49.446	1.00	40.85	CCCC
ATOM	7799	ND1	HIS	C	18	19.123	29.971	50.456	1.00	40.85	CCCC
ATOM	7800	CE1	HIS	C	18	18.573	30.780	51.347	1.00	41.29	CCCC
ATOM	7801	NE2	HIS	C	18	18.319	31.937	50.759	1.00	42.00	CCCC
ATOM	7802	C	HIS	C	18	21.899	29.537	46.696	1.00	43.98	CCCC
ATOM	7803	O	HIS	C	18	21.144	29.196	45.790	1.00	45.86	CCCC
ATOM	7804	N	GLY	C	19	23.214	29.393	46.645	1.00	45.08	CCCC
ATOM	7805	CA	GLY	C	19	23.869	28.846	45.477	1.00	45.18	CCCC
ATOM	7806	C	GLY	C	19	25.320	29.214	45.617	1.00	44.95	CCCC
ATOM	7807	O	GLY	C	19	25.682	29.876	46.575	1.00	46.12	CCCC
ATOM	7808	N	THR	C	20	26.152	28.827	44.667	1.00	45.35	CCCC
ATOM	7809	CA	THR	C	20	27.570	29.112	44.786	1.00	46.31	CCCC
ATOM	7810	CB	THR	C	20	28.404	27.853	44.444	1.00	44.86	CCCC
ATOM	7811	OG1	THR	C	20	28.360	27.625	43.036	1.00	45.83	CCCC
ATOM	7812	CG2	THR	C	20	27.838	26.629	45.133	1.00	42.40	CCCC
ATOM	7813	C	THR	C	20	28.035	30.257	43.903	1.00	48.10	CCCC
ATOM	7814	O	THR	C	20	27.517	30.448	42.803	1.00	49.80	CCCC
ATOM	7815	N	CYS	C	21	29.004	31.031	44.386	1.00	48.82	CCCC
ATOM	7816	CA	CYS	C	21	29.532	32.109	43.578	1.00	49.96	CCCC
ATOM	7817	C	CYS	C	21	30.575	31.531	42.654	1.00	48.97	CCCC
ATOM	7818	O	CYS	C	21	31.102	30.449	42.894	1.00	49.51	CCCC
ATOM	7819	CB	CYS	C	21	30.205	33.212	44.404	1.00	53.74	CCCC
ATOM	7820	SG	CYS	C	21	31.157	34.324	43.299	1.00	62.23	CCCC
ATOM	7821	N	ARG	C	22	30.838	32.260	41.578	1.00	47.91	CCCC
ATOM	7822	CA	ARG	C	22	31.852	31.918	40.601	1.00	46.52	CCCC
ATOM	7823	CB	ARG	C	22	31.362	30.880	39.592	1.00	43.45	CCCC
ATOM	7824	CG	ARG	C	22	30.197	31.296	38.725	1.00	43.43	CCCC
ATOM	7825	CD	ARG	C	22	29.841	30.170	37.760	1.00	39.94	CCCC
ATOM	7826	NE	ARG	C	22	28.657	30.462	36.960	1.00	36.89	CCCC
ATOM	7827	CZ	ARG	C	22	28.151	29.626	36.064	1.00	36.15	CCCC
ATOM	7828	NH1	ARG	C	22	28.732	28.454	35.856	1.00	33.28	CCCC
ATOM	7829	NH2	ARG	C	22	27.064	29.955	35.384	1.00	35.89	CCCC
ATOM	7830	C	ARG	C	22	32.156	33.240	39.921	1.00	48.25	CCCC
ATOM	7831	O	ARG	C	22	31.265	34.068	39.723	1.00	46.01	CCCC
ATOM	7832	N	PHE	C	23	33.426	33.455	39.607	1.00	50.87	CCCC
ATOM	7833	CA	PHE	C	23	33.844	34.689	38.969	1.00	53.60	CCCC
ATOM	7834	CB	PHE	C	23	35.199	35.124	39.523	1.00	56.02	CCCC
ATOM	7835	CG	PHE	C	23	35.500	36.586	39.325	1.00	57.16	CCCC
ATOM	7836	CD1	PHE	C	23	34.927	37.542	40.155	1.00	57.10	CCCC
ATOM	7837	CD2	PHE	C	23	36.381	37.002	38.331	1.00	58.22	CCCC
ATOM	7838	CE1	PHE	C	23	35.227	38.887	40.006	1.00	57.73	CCCC
ATOM	7839	CE2	PHE	C	23	36.687	38.345	38.174	1.00	59.39	CCCC
ATOM	7840	CZ	PHE	C	23	36.108	39.290	39.017	1.00	58.87	CCCC
ATOM	7841	C	PHE	C	23	33.965	34.401	37.492	1.00	53.56	CCCC
ATOM	7842	O	PHE	C	23	34.715	33.510	37.095	1.00	52.87	CCCC
ATOM	7843	N	LEU	C	24	33.229	35.131	36.666	1.00	54.07	CCCC
ATOM	7844	CA	LEU	C	24	33.339	34.860	35.252	1.00	56.07	CCCC
ATOM	7845	CB	LEU	C	24	31.962	34.876	34.581	1.00	57.31	CCCC
ATOM	7846	CG	LEU	C	24	31.175	36.141	34.300	1.00	59.43	CCCC
ATOM	7847	CD1	LEU	C	24	31.599	36.686	32.941	1.00	60.63	CCCC
ATOM	7848	CD2	LEU	C	24	29.691	35.808	34.289	1.00	59.57	CCCC
ATOM	7849	C	LEU	C	24	34.307	35.859	34.661	1.00	56.70	CCCC
ATOM	7850	O	LEU	C	24	34.113	37.072	34.726	1.00	55.94	CCCC
ATOM	7851	N	VAL	C	25	35.384	35.298	34.123	1.00	58.19	CCCC
ATOM	7852	CA	VAL	C	25	36.501	36.018	33.528	1.00	58.67	CCCC
ATOM	7853	CB	VAL	C	25	37.458	35.003	32.873	1.00	58.62	CCCC
ATOM	7854	CG1	VAL	C	25	38.690	35.706	32.321	1.00	58.46	CCCC
ATOM	7855	CG2	VAL	C	25	37.850	33.948	33.899	1.00	56.87	CCCC
ATOM	7856	C	VAL	C	25	36.223	37.160	32.543	1.00	59.18	CCCC
ATOM	7857	O	VAL	C	25	36.584	38.308	32.813	1.00	60.04	CCCC
ATOM	7858	N	GLN	C	26	35.593	36.863	31.410	1.00	58.33	CCCC
ATOM	7859	CA	GLN	C	26	35.333	37.897	30.413	1.00	58.40	CCCC
ATOM	7860	CB	GLN	C	26	34.611	37.292	29.217	1.00	58.03	CCCC
ATOM	7861	CG	GLN	C	26	35.568	36.816	28.139	1.00	58.89	CCCC
ATOM	7862	CD	GLN	C	26	34.969	35.742	27.255	1.00	59.58	CCCC
ATOM	7863	OE1	GLN	C	26	35.550	35.361	26.239	1.00	57.92	CCCC
ATOM	7864	NE2	GLN	C	26	33.803	35.238	27.647	1.00	59.22	CCCC
ATOM	7865	C	GLN	C	26	34.611	39.159	30.878	1.00	59.27	CCCC
ATOM	7866	O	GLN	C	26	34.906	40.253	30.397	1.00	59.52	CCCC
ATOM	7867	N	GLU	C	27	33.673	39.030	31.806	1.00	59.66	CCCC
ATOM	7868	CA	GLU	C	27	32.964	40.209	32.292	1.00	60.37	CCCC
ATOM	7869	CB	GLU	C	27	31.493	39.878	32.548	1.00	61.29	CCCC
ATOM	7870	CG	GLU	C	27	30.706	39.585	31.296	1.00	59.90	CCCC

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ATOM	7871	CD	GLU	C	27	30.756	40.731	30.320	1.00	58.25	CCCC
ATOM	7872	OE1	GLU	C	27	30.392	41.856	30.710	1.00	57.67	CCCC
ATOM	7873	OE2	GLU	C	27	31.156	40.503	29.162	1.00	59.31	CCCC
ATOM	7874	C	GLU	C	27	33.604	40.726	33.575	1.00	60.55	CCCC
ATOM	7875	O	GLU	C	27	33.284	41.817	34.057	1.00	59.38	CCCC
ATOM	7876	N	ASP	C	28	34.514	39.923	34.115	1.00	61.11	CCCC
ATOM	7877	CA	ASP	C	28	35.220	40.253	35.342	1.00	61.85	CCCC
ATOM	7878	CB	ASP	C	28	36.276	41.323	35.072	1.00	63.96	CCCC
ATOM	7879	CG	ASP	C	28	37.415	41.261	36.059	1.00	65.61	CCCC
ATOM	7880	OD1	ASP	C	28	37.249	41.740	37.200	1.00	66.05	CCCC
ATOM	7881	OD2	ASP	C	28	38.471	40.705	35.696	1.00	67.64	CCCC
ATOM	7882	C	ASP	C	28	34.267	40.715	36.439	1.00	61.10	CCCC
ATOM	7883	O	ASP	C	28	34.247	41.883	36.833	1.00	61.18	CCCC
ATOM	7884	N	LYS	C	29	33.468	39.773	36.918	1.00	60.17	CCCC
ATOM	7885	CA	LYS	C	29	32.503	40.033	37.970	1.00	58.55	CCCC
ATOM	7886	CB	LYS	C	29	31.359	40.910	37.461	1.00	58.72	CCCC
ATOM	7887	CG	LYS	C	29	30.532	40.273	36.367	1.00	60.57	CCCC
ATOM	7888	CD	LYS	C	29	29.463	41.233	35.858	1.00	63.60	CCCC
ATOM	7889	CE	LYS	C	29	30.083	42.502	35.290	1.00	65.37	CCCC
ATOM	7890	NZ	LYS	C	29	29.071	43.462	34.759	1.00	67.23	CCCC
ATOM	7891	C	LYS	C	29	31.945	38.704	38.441	1.00	57.25	CCCC
ATOM	7892	O	LYS	C	29	31.966	37.701	37.711	1.00	58.36	CCCC
ATOM	7893	N	PRO	C	30	31.460	38.670	39.682	1.00	53.91	CCCC
ATOM	7894	CD	PRO	C	30	31.714	39.654	40.749	1.00	51.72	CCCC
ATOM	7895	CA	PRO	C	30	30.898	37.436	40.223	1.00	51.91	CCCC
ATOM	7896	CB	PRO	C	30	31.111	37.600	41.725	1.00	51.27	CCCC
ATOM	7897	CG	PRO	C	30	30.946	39.074	41.907	1.00	52.87	CCCC
ATOM	7898	C	PRO	C	30	29.425	37.232	39.852	1.00	50.54	CCCC
ATOM	7899	O	PRO	C	30	28.663	38.187	39.698	1.00	48.77	CCCC
ATOM	7900	N	ALA	C	31	29.047	35.967	39.706	1.00	49.81	CCCC
ATOM	7901	CA	ALA	C	31	27.682	35.582	39.379	1.00	48.75	CCCC
ATOM	7902	CB	ALA	C	31	27.572	35.207	37.903	1.00	47.00	CCCC
ATOM	7903	C	ALA	C	31	27.342	34.383	40.260	1.00	48.41	CCCC
ATOM	7904	O	ALA	C	31	28.192	33.903	41.022	1.00	46.96	CCCC
ATOM	7905	N	CYS	C	32	26.106	33.898	40.158	1.00	46.61	CCCC
ATOM	7906	CA	CYS	C	32	25.688	32.761	40.964	1.00	43.42	CCCC
ATOM	7907	C	CYS	C	32	25.175	31.564	40.167	1.00	42.28	CCCC
ATOM	7908	O	CYS	C	32	24.931	31.639	38.964	1.00	41.80	CCCC
ATOM	7909	CB	CYS	C	32	24.594	33.187	41.936	1.00	42.87	CCCC
ATOM	7910	SG	CYS	C	32	25.049	34.554	43.036	1.00	44.86	CCCC
ATOM	7911	N	VAL	C	33	25.036	30.455	40.879	1.00	39.28	CCCC
ATOM	7912	CA	VAL	C	33	24.504	29.216	40.363	1.00	36.94	CCCC
ATOM	7913	CB	VAL	C	33	25.602	28.184	40.093	1.00	35.89	CCCC
ATOM	7914	CG1	VAL	C	33	24.982	26.870	39.682	1.00	34.26	CCCC
ATOM	7915	CG2	VAL	C	33	26.512	28.670	38.998	1.00	35.46	CCCC
ATOM	7916	C	VAL	C	33	23.675	28.769	41.557	1.00	37.86	CCCC
ATOM	7917	O	VAL	C	33	24.175	28.076	42.430	1.00	40.78	CCCC
ATOM	7918	N	CYS	C	34	22.416	29.187	41.596	1.00	37.33	CCCC
ATOM	7919	CA	CYS	C	34	21.510	28.876	42.697	1.00	38.02	CCCC
ATOM	7920	C	CYS	C	34	21.245	27.414	43.017	1.00	38.57	CCCC
ATOM	7921	O	CYS	C	34	21.339	26.545	42.152	1.00	38.22	CCCC
ATOM	7922	CB	CYS	C	34	20.153	29.527	42.454	1.00	38.77	CCCC
ATOM	7923	SG	CYS	C	34	20.203	31.254	41.920	1.00	38.13	CCCC
ATOM	7924	N	HIS	C	35	20.889	27.164	44.273	1.00	38.89	CCCC
ATOM	7925	CA	HIS	C	35	20.541	25.826	44.731	1.00	42.30	CCCC
ATOM	7926	CB	HIS	C	35	20.523	25.744	46.257	1.00	45.69	CCCC
ATOM	7927	CG	HIS	C	35	21.870	25.839	46.888	1.00	49.26	CCCC
ATOM	7928	CD2	HIS	C	35	23.093	25.457	46.447	1.00	50.89	CCCC
ATOM	7929	ND1	HIS	C	35	22.061	26.373	48.143	1.00	51.13	CCCC
ATOM	7930	CE1	HIS	C	35	23.345	26.319	48.448	1.00	54.28	CCCC
ATOM	7931	NE2	HIS	C	35	23.993	25.767	47.436	1.00	54.18	CCCC
ATOM	7932	C	HIS	C	35	19.117	25.636	44.255	1.00	43.94	CCCC
ATOM	7933	O	HIS	C	35	18.315	26.574	44.304	1.00	44.82	CCCC
ATOM	7934	N	SER	C	36	18.791	24.426	43.820	1.00	44.20	CCCC
ATOM	7935	CA	SER	C	36	17.454	24.133	43.342	1.00	43.04	CCCC
ATOM	7936	CB	SER	C	36	17.190	22.632	43.404	1.00	45.38	CCCC
ATOM	7937	OG	SER	C	36	16.961	22.247	44.748	1.00	48.54	CCCC
ATOM	7938	C	SER	C	36	16.440	24.836	44.225	1.00	41.31	CCCC
ATOM	7939	O	SER	C	36	16.531	24.767	45.453	1.00	42.40	CCCC
ATOM	7940	N	GLY	C	37	15.490	25.527	43.602	1.00	38.78	CCCC
ATOM	7941	CA	GLY	C	37	14.461	26.197	44.368	1.00	36.46	CCCC
ATOM	7942	C	GLY	C	37	14.713	27.646	44.707	1.00	35.73	CCCC
ATOM	7943	O	GLY	C	37	14.097	28.174	45.640	1.00	36.23	CCCC
ATOM	7944	N	TYR	C	38	15.604	28.297	43.965	1.00	31.78	CCCC
ATOM	7945	CA	TYR	C	38	15.888	29.699	44.221	1.00	30.70	CCCC

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ATOM	7946	CB	TYR	C	38	17.067	29.862	45.194	1.00	29.34	CCCC
ATOM	7947	CG	TYR	C	38	16.669	29.562	46.606	1.00	29.76	CCCC
ATOM	7948	CD1	TYR	C	38	16.738	28.265	47.111	1.00	30.09	CCCC
ATOM	7949	CE1	TYR	C	38	16.288	27.973	48.382	1.00	29.92	CCCC
ATOM	7950	CD2	TYR	C	38	16.141	30.564	47.420	1.00	31.01	CCCC
ATOM	7951	CE2	TYR	C	38	15.690	30.287	48.689	1.00	30.37	CCCC
ATOM	7952	CZ	TYR	C	38	15.763	28.988	49.165	1.00	33.84	CCCC
ATOM	7953	OH	TYR	C	38	15.288	28.705	50.429	1.00	39.99	CCCC
ATOM	7954	C	TYR	C	38	16.146	30.476	42.951	1.00	29.54	CCCC
ATOM	7955	O	TYR	C	38	16.598	29.921	41.950	1.00	32.21	CCCC
ATOM	7956	N	VAL	C	39	15.859	31.771	43.004	1.00	26.35	CCCC
ATOM	7957	CA	VAL	C	39	16.028	32.626	41.848	1.00	25.17	CCCC
ATOM	7958	CB	VAL	C	39	14.657	32.839	41.105	1.00	25.23	CCCC
ATOM	7959	CG1	VAL	C	39	14.123	31.503	40.576	1.00	22.93	CCCC
ATOM	7960	CG2	VAL	C	39	13.634	33.456	42.052	1.00	20.90	CCCC
ATOM	7961	C	VAL	C	39	16.562	33.971	42.291	1.00	25.57	CCCC
ATOM	7962	O	VAL	C	39	16.547	34.295	43.485	1.00	23.79	CCCC
ATOM	7963	N	GLY	C	40	17.025	34.749	41.316	1.00	25.53	CCCC
ATOM	7964	CA	GLY	C	40	17.550	36.070	41.588	1.00	26.15	CCCC
ATOM	7965	C	GLY	C	40	18.992	36.250	41.163	1.00	27.25	CCCC
ATOM	7966	O	GLY	C	40	19.735	35.273	41.031	1.00	26.49	CCCC
ATOM	7967	N	ALA	C	41	19.387	37.502	40.938	1.00	28.82	CCCC
ATOM	7968	CA	ALA	C	41	20.762	37.800	40.558	1.00	30.09	CCCC
ATOM	7969	CB	ALA	C	41	20.946	39.249	40.392	1.00	28.46	CCCC
ATOM	7970	C	ALA	C	41	21.694	37.290	41.635	1.00	31.85	CCCC
ATOM	7971	O	ALA	C	41	22.805	36.917	41.344	1.00	32.63	CCCC
ATOM	7972	N	ARG	C	42	21.227	37.267	42.882	1.00	35.64	CCCC
ATOM	7973	CA	ARG	C	42	22.024	36.763	44.005	1.00	36.57	CCCC
ATOM	7974	CB	ARG	C	42	22.261	37.867	45.046	1.00	38.96	CCCC
ATOM	7975	CG	ARG	C	42	23.330	38.886	44.638	1.00	40.36	CCCC
ATOM	7976	CD	ARG	C	42	23.493	40.002	45.667	1.00	42.46	CCCC
ATOM	7977	NE	ARG	C	42	24.227	39.598	46.865	1.00	42.85	CCCC
ATOM	7978	CZ	ARG	C	42	24.375	40.371	47.940	1.00	42.94	CCCC
ATOM	7979	NH1	ARG	C	42	23.844	41.588	47.972	1.00	41.41	CCCC
ATOM	7980	NH2	ARG	C	42	25.052	39.928	48.987	1.00	43.03	CCCC
ATOM	7981	C	ARG	C	42	21.367	35.558	44.683	1.00	36.97	CCCC
ATOM	7982	O	ARG	C	42	21.655	35.264	45.846	1.00	34.31	CCCC
ATOM	7983	N	CYS	C	43	20.474	34.881	43.952	1.00	36.70	CCCC
ATOM	7984	CA	CYS	C	43	19.786	33.694	44.452	1.00	33.31	CCCC
ATOM	7985	C	CYS	C	43	19.164	33.960	45.812	1.00	32.61	CCCC
ATOM	7986	O	CYS	C	43	19.267	33.144	46.729	1.00	31.13	CCCC
ATOM	7987	CB	CYS	C	43	20.779	32.540	44.575	1.00	37.36	CCCC
ATOM	7988	SG	CYS	C	43	21.679	32.063	43.057	1.00	41.88	CCCC
ATOM	7989	N	GLU	C	44	18.498	35.100	45.934	1.00	32.62	CCCC
ATOM	7990	CA	GLU	C	44	17.897	35.498	47.196	1.00	32.06	CCCC
ATOM	7991	CB	GLU	C	44	18.093	36.996	47.405	1.00	32.84	CCCC
ATOM	7992	CG	GLU	C	44	17.225	37.875	46.540	1.00	31.46	CCCC
ATOM	7993	CD	GLU	C	44	17.801	38.107	45.162	1.00	34.87	CCCC
ATOM	7994	OE1	GLU	C	44	17.283	39.006	44.454	1.00	37.12	CCCC
ATOM	7995	OE2	GLU	C	44	18.760	37.402	44.775	1.00	34.61	CCCC
ATOM	7996	C	GLU	C	44	16.422	35.182	47.330	1.00	32.58	CCCC
ATOM	7997	O	GLU	C	44	15.863	35.255	48.416	1.00	33.75	CCCC
ATOM	7998	N	HIS	C	45	15.778	34.839	46.225	1.00	33.32	CCCC
ATOM	7999	CA	HIS	C	45	14.358	34.544	46.271	1.00	30.80	CCCC
ATOM	8000	CB	HIS	C	45	13.636	35.394	45.242	1.00	29.37	CCCC
ATOM	8001	CG	HIS	C	45	13.568	36.842	45.613	1.00	31.80	CCCC
ATOM	8002	CD2	HIS	C	45	13.535	37.448	46.823	1.00	28.98	CCCC
ATOM	8003	ND1	HIS	C	45	13.447	37.848	44.678	1.00	32.21	CCCC
ATOM	8004	CE1	HIS	C	45	13.336	39.009	45.295	1.00	29.88	CCCC
ATOM	8005	NE2	HIS	C	45	13.386	38.793	46.597	1.00	31.40	CCCC
ATOM	8006	C	HIS	C	45	14.046	33.081	46.066	1.00	31.10	CCCC
ATOM	8007	O	HIS	C	45	14.671	32.397	45.270	1.00	30.86	CCCC
ATOM	8008	N	ALA	C	46	13.084	32.611	46.837	1.00	32.65	CCCC
ATOM	8009	CA	ALA	C	46	12.630	31.242	46.775	1.00	34.39	CCCC
ATOM	8010	CB	ALA	C	46	11.990	30.875	48.107	1.00	31.17	CCCC
ATOM	8011	C	ALA	C	46	11.587	31.211	45.659	1.00	37.13	CCCC
ATOM	8012	O	ALA	C	46	10.720	32.092	45.610	1.00	37.11	CCCC
ATOM	8013	N	ASP	C	47	11.672	30.255	44.733	1.00	40.22	CCCC
ATOM	8014	CA	ASP	C	47	10.639	30.224	43.712	1.00	43.75	CCCC
ATOM	8015	CB	ASP	C	47	10.992	29.345	42.492	1.00	45.84	CCCC
ATOM	8016	CG	ASP	C	47	11.483	27.950	42.853	1.00	50.32	CCCC
ATOM	8017	OD1	ASP	C	47	11.050	27.367	43.877	1.00	51.00	CCCC
ATOM	8018	OD2	ASP	C	47	12.304	27.417	42.067	1.00	52.56	CCCC
ATOM	8019	C	ASP	C	47	9.417	29.713	44.446	1.00	44.71	CCCC
ATOM	8020	O	ASP	C	47	9.287	28.534	44.760	1.00	44.30	CCCC

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ATOM	8021	N	LEU	C	48	8.534	30.638	44.775	1.00	47.31	CCCC
ATOM	8022	CA	LEU	C	48	7.341	30.279	45.503	1.00	49.35	CCCC
ATOM	8023	CB	LEU	C	48	6.541	31.540	45.803	1.00	45.27	CCCC
ATOM	8024	CG	LEU	C	48	7.427	32.561	46.529	1.00	40.98	CCCC
ATOM	8025	CD1	LEU	C	48	6.619	33.797	46.866	1.00	39.56	CCCC
ATOM	8026	CD2	LEU	C	48	7.985	31.936	47.790	1.00	37.29	CCCC
ATOM	8027	C	LEU	C	48	6.556	29.270	44.683	1.00	53.09	CCCC
ATOM	8028	O	LEU	C	48	5.603	28.663	45.162	1.00	54.58	CCCC
ATOM	8029	N	LEU	C	49	6.979	29.083	43.439	1.00	57.46	CCCC
ATOM	8030	CA	LEU	C	49	6.341	28.113	42.560	1.00	60.79	CCCC
ATOM	8031	CB	LEU	C	49	6.606	28.475	41.096	1.00	61.57	CCCC
ATOM	8032	CG	LEU	C	49	6.036	29.861	40.758	1.00	62.59	CCCC
ATOM	8033	CD1	LEU	C	49	6.332	30.229	39.306	1.00	62.02	CCCC
ATOM	8034	CD2	LEU	C	49	4.533	29.856	41.028	1.00	61.67	CCCC
ATOM	8035	C	LEU	C	49	6.951	26.764	42.932	1.00	62.35	CCCC
ATOM	8036	O	LEU	C	49	7.468	26.021	42.091	1.00	59.48	CCCC
ATOM	8037	N	ALA	C	50	6.891	26.493	44.235	1.00	64.71	CCCC
ATOM	8038	CA	ALA	C	50	7.405	25.272	44.833	1.00	67.20	CCCC
ATOM	8039	CB	ALA	C	50	7.701	25.504	46.320	1.00	67.40	CCCC
ATOM	8040	C	ALA	C	50	6.379	24.163	44.668	1.00	68.43	CCCC
ATOM	8041	OT1	ALA	C	50	5.739	23.801	45.685	1.00	69.62	CCCC
ATOM	8042	OT2	ALA	C	50	6.222	23.685	43.521	1.00	68.84	CCCC
ATOM	8043	CB	SER	D	3	-35.516	104.628	0.147	1.00	103.77	DDDD
ATOM	8044	OG	SER	D	3	-35.810	105.958	-0.250	1.00	104.37	DDDD
ATOM	8045	C	SER	D	3	-36.280	102.628	1.453	1.00	102.77	DDDD
ATOM	8046	O	SER	D	3	-36.949	101.675	1.039	1.00	102.67	DDDD
ATOM	8047	N	SER	D	3	-36.776	104.920	2.258	1.00	102.88	DDDD
ATOM	8048	CA	SER	D	3	-36.620	104.063	1.048	1.00	103.08	DDDD
ATOM	8049	N	HIS	D	4	-35.231	102.488	2.260	1.00	101.60	DDDD
ATOM	8050	CA	HIS	D	4	-34.785	101.188	2.754	1.00	100.63	DDDD
ATOM	8051	CB	HIS	D	4	-33.358	101.291	3.316	1.00	98.07	DDDD
ATOM	8052	CG	HIS	D	4	-32.322	100.571	2.508	1.00	95.75	DDDD
ATOM	8053	CD2	HIS	D	4	-31.136	100.990	2.006	1.00	94.30	DDDD
ATOM	8054	ND1	HIS	D	4	-32.434	99.240	2.164	1.00	94.09	DDDD
ATOM	8055	CE1	HIS	D	4	-31.363	98.872	1.485	1.00	93.20	DDDD
ATOM	8056	NE2	HIS	D	4	-30.559	99.914	1.376	1.00	93.11	DDDD
ATOM	8057	C	HIS	D	4	-35.715	100.756	3.884	1.00	101.12	DDDD
ATOM	8058	O	HIS	D	4	-35.766	99.579	4.253	1.00	100.96	DDDD
ATOM	8059	N	PHE	D	5	-36.461	101.721	4.415	1.00	101.61	DDDD
ATOM	8060	CA	PHE	D	5	-37.348	101.478	5.545	1.00	102.01	DDDD
ATOM	8061	CB	PHE	D	5	-36.916	102.388	6.702	1.00	102.86	DDDD
ATOM	8062	CG	PHE	D	5	-35.452	102.761	6.655	1.00	102.90	DDDD
ATOM	8063	CD1	PHE	D	5	-35.011	103.801	5.836	1.00	102.92	DDDD
ATOM	8064	CD2	PHE	D	5	-34.508	102.034	7.376	1.00	103.46	DDDD
ATOM	8065	CE1	PHE	D	5	-33.654	104.110	5.731	1.00	102.86	DDDD
ATOM	8066	CE2	PHE	D	5	-33.145	102.335	7.278	1.00	103.80	DDDD
ATOM	8067	CZ	PHE	D	5	-32.719	103.375	6.453	1.00	103.37	DDDD
ATOM	8068	C	PHE	D	5	-38.834	101.663	5.243	1.00	101.52	DDDD
ATOM	8069	O	PHE	D	5	-39.211	102.407	4.341	1.00	101.37	DDDD
ATOM	8070	N	ASN	D	6	-39.666	100.977	6.021	1.00	101.24	DDDD
ATOM	8071	CA	ASN	D	6	-41.117	101.018	5.863	1.00	101.07	DDDD
ATOM	8072	CB	ASN	D	6	-41.605	99.633	5.417	1.00	101.34	DDDD
ATOM	8073	CG	ASN	D	6	-43.062	99.623	4.998	1.00	101.43	DDDD
ATOM	8074	OD1	ASN	D	6	-43.962	99.881	5.801	1.00	100.90	DDDD
ATOM	8075	ND2	ASN	D	6	-43.302	99.319	3.729	1.00	101.31	DDDD
ATOM	8076	C	ASN	D	6	-41.798	101.425	7.179	1.00	100.52	DDDD
ATOM	8077	O	ASN	D	6	-41.588	102.529	7.685	1.00	100.37	DDDD
ATOM	8078	N	ASP	D	7	-42.616	100.524	7.718	1.00	99.91	DDDD
ATOM	8079	CA	ASP	D	7	-43.335	100.744	8.971	1.00	99.42	DDDD
ATOM	8080	CB	ASP	D	7	-44.663	101.460	8.704	1.00	101.13	DDDD
ATOM	8081	CG	ASP	D	7	-44.472	102.856	8.109	1.00	102.85	DDDD
ATOM	8082	OD1	ASP	D	7	-43.897	103.734	8.795	1.00	102.35	DDDD
ATOM	8083	OD2	ASP	D	7	-44.899	103.073	6.951	1.00	103.31	DDDD
ATOM	8084	C	ASP	D	7	-43.580	99.373	9.605	1.00	98.30	DDDD
ATOM	8085	O	ASP	D	7	-43.828	98.394	8.901	1.00	98.76	DDDD
ATOM	8086	N	CYS	D	8	-43.514	99.296	10.928	1.00	96.27	DDDD
ATOM	8087	CA	CYS	D	8	-43.691	98.014	11.600	1.00	94.52	DDDD
ATOM	8088	C	CYS	D	8	-45.128	97.529	11.762	1.00	94.68	DDDD
ATOM	8089	O	CYS	D	8	-46.046	98.319	11.975	1.00	94.41	DDDD
ATOM	8090	CB	CYS	D	8	-43.006	98.042	12.970	1.00	92.07	DDDD
ATOM	8091	SG	CYS	D	8	-41.193	98.240	12.907	1.00	88.51	DDDD
ATOM	8092	N	PRO	D	9	-45.329	96.202	11.658	1.00	94.74	DDDD
ATOM	8093	CD	PRO	D	9	-44.280	95.293	11.163	1.00	94.74	DDDD
ATOM	8094	CA	PRO	D	9	-46.602	95.485	11.775	1.00	95.31	DDDD
ATOM	8095	CB	PRO	D	9	-46.198	94.035	11.528	1.00	94.58	DDDD

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ATOM	8096	CG	PRO	D	9	-45.086	94.172	10.562	1.00	94.88	DDDD
ATOM	8097	C	PRO	D	9	-47.342	95.648	13.107	1.00	96.42	DDDD
ATOM	8098	O	PRO	D	9	-47.413	96.745	13.670	1.00	96.29	DDDD
ATOM	8099	N	ASP	D	10	-47.889	94.533	13.594	1.00	97.14	DDDD
ATOM	8100	CA	ASP	D	10	-48.659	94.492	14.835	1.00	97.69	DDDD
ATOM	8101	CB	ASP	D	10	-49.005	93.039	15.177	1.00	98.97	DDDD
ATOM	8102	CG	ASP	D	10	-50.336	92.909	15.904	1.00	100.54	DDDD
ATOM	8103	OD1	ASP	D	10	-50.446	93.386	17.054	1.00	101.62	DDDD
ATOM	8104	OD2	ASP	D	10	-51.276	92.330	15.318	1.00	100.69	DDDD
ATOM	8105	C	ASP	D	10	-47.920	95.144	16.000	1.00	97.34	DDDD
ATOM	8106	O	ASP	D	10	-47.219	94.477	16.764	1.00	97.87	DDDD
ATOM	8107	N	ALA	D	11	-48.099	96.454	16.137	1.00	95.68	DDDD
ATOM	8108	CA	ALA	D	11	-47.444	97.214	17.191	1.00	93.68	DDDD
ATOM	8109	CB	ALA	D	11	-47.629	98.706	16.936	1.00	94.04	DDDD
ATOM	8110	C	ALA	D	11	-47.921	96.861	18.599	1.00	92.34	DDDD
ATOM	8111	O	ALA	D	11	-47.903	97.714	19.488	1.00	91.85	DDDD
ATOM	8112	N	ALA	D	12	-48.348	95.614	18.801	1.00	91.06	DDDD
ATOM	8113	CA	ALA	D	12	-48.810	95.158	20.120	1.00	89.37	DDDD
ATOM	8114	CB	ALA	D	12	-49.369	93.744	20.028	1.00	88.91	DDDD
ATOM	8115	C	ALA	D	12	-47.614	95.191	21.068	1.00	88.11	DDDD
ATOM	8116	O	ALA	D	12	-46.528	94.722	20.716	1.00	88.74	DDDD
ATOM	8117	N	ALA	D	13	-47.816	95.726	22.270	1.00	85.59	DDDD
ATOM	8118	CA	ALA	D	13	-46.726	95.861	23.234	1.00	83.05	DDDD
ATOM	8119	CB	ALA	D	13	-46.084	94.514	23.538	1.00	81.88	DDDD
ATOM	8120	C	ALA	D	13	-45.724	96.777	22.547	1.00	81.43	DDDD
ATOM	8121	O	ALA	D	13	-45.901	97.994	22.550	1.00	82.76	DDDD
ATOM	8122	N	GLN	D	14	-44.694	96.185	21.945	1.00	78.55	DDDD
ATOM	8123	CA	GLN	D	14	-43.660	96.928	21.225	1.00	76.00	DDDD
ATOM	8124	CB	GLN	D	14	-43.307	98.235	21.948	1.00	77.31	DDDD
ATOM	8125	CG	GLN	D	14	-42.624	98.039	23.289	1.00	80.17	DDDD
ATOM	8126	CD	GLN	D	14	-42.535	99.317	24.097	1.00	82.07	DDDD
ATOM	8127	OE1	GLN	D	14	-42.010	100.331	23.628	1.00	82.95	DDDD
ATOM	8128	NE2	GLN	D	14	-43.046	99.274	25.328	1.00	83.05	DDDD
ATOM	8129	C	GLN	D	14	-42.405	96.079	21.088	1.00	73.09	DDDD
ATOM	8130	O	GLN	D	14	-41.961	95.444	22.045	1.00	72.32	DDDD
ATOM	8131	N	PHE	D	15	-41.838	96.069	19.889	1.00	69.90	DDDD
ATOM	8132	CA	PHE	D	15	-40.633	95.302	19.635	1.00	66.79	DDDD
ATOM	8133	CB	PHE	D	15	-40.399	95.158	18.126	1.00	67.15	DDDD
ATOM	8134	CG	PHE	D	15	-39.244	94.256	17.775	1.00	66.47	DDDD
ATOM	8135	CD1	PHE	D	15	-39.195	92.953	18.252	1.00	65.39	DDDD
ATOM	8136	CD2	PHE	D	15	-38.204	94.713	16.974	1.00	66.61	DDDD
ATOM	8137	CE1	PHE	D	15	-38.134	92.122	17.938	1.00	65.41	DDDD
ATOM	8138	CE2	PHE	D	15	-37.137	93.884	16.654	1.00	66.07	DDDD
ATOM	8139	CZ	PHE	D	15	-37.103	92.588	17.137	1.00	66.29	DDDD
ATOM	8140	C	PHE	D	15	-39.445	96.004	20.291	1.00	64.59	DDDD
ATOM	8141	O	PHE	D	15	-38.688	95.383	21.043	1.00	63.48	DDDD
ATOM	8142	N	CYS	D	16	-39.288	97.297	20.003	1.00	60.06	DDDD
ATOM	8143	CA	CYS	D	16	-38.203	98.069	20.582	1.00	56.11	DDDD
ATOM	8144	C	CYS	D	16	-38.595	98.551	21.958	1.00	54.98	DDDD
ATOM	8145	O	CYS	D	16	-39.692	99.067	22.159	1.00	55.03	DDDD
ATOM	8146	CB	CYS	D	16	-37.874	99.274	19.723	1.00	54.09	DDDD
ATOM	8147	SG	CYS	D	16	-37.799	98.833	17.982	1.00	52.53	DDDD
ATOM	8148	N	PHE	D	17	-37.683	98.398	22.907	1.00	53.23	DDDD
ATOM	8149	CA	PHE	D	17	-37.957	98.813	24.266	1.00	51.60	DDDD
ATOM	8150	CB	PHE	D	17	-37.194	97.926	25.239	1.00	50.39	DDDD
ATOM	8151	CG	PHE	D	17	-37.643	96.494	25.225	1.00	49.26	DDDD
ATOM	8152	CD1	PHE	D	17	-38.923	96.153	25.629	1.00	49.21	DDDD
ATOM	8153	CD2	PHE	D	17	-36.773	95.484	24.845	1.00	49.06	DDDD
ATOM	8154	CE1	PHE	D	17	-39.332	94.819	25.663	1.00	50.68	DDDD
ATOM	8155	CE2	PHE	D	17	-37.172	94.150	24.875	1.00	50.32	DDDD
ATOM	8156	CZ	PHE	D	17	-38.455	93.818	25.288	1.00	49.89	DDDD
ATOM	8157	C	PHE	D	17	-37.624	100.267	24.516	1.00	50.37	DDDD
ATOM	8158	O	PHE	D	17	-38.246	100.901	25.356	1.00	52.70	DDDD
ATOM	8159	N	HIS	D	18	-36.657	100.804	23.786	1.00	50.02	DDDD
ATOM	8160	CA	HIS	D	18	-36.267	102.196	23.977	1.00	50.14	DDDD
ATOM	8161	CB	HIS	D	18	-35.109	102.271	24.971	1.00	49.93	DDDD
ATOM	8162	CG	HIS	D	18	-35.479	101.809	26.341	1.00	49.67	DDDD
ATOM	8163	CD2	HIS	D	18	-35.425	100.582	26.913	1.00	50.22	DDDD
ATOM	8164	ND1	HIS	D	18	-36.064	102.640	27.271	1.00	49.64	DDDD
ATOM	8165	CE1	HIS	D	18	-36.359	101.943	28.355	1.00	49.42	DDDD
ATOM	8166	NE2	HIS	D	18	-35.984	100.691	28.163	1.00	48.22	DDDD
ATOM	8167	C	HIS	D	18	-35.898	102.879	22.669	1.00	50.32	DDDD
ATOM	8168	O	HIS	D	18	-34.781	103.361	22.478	1.00	49.27	DDDD
ATOM	8169	N	GLY	D	19	-36.872	102.925	21.776	1.00	51.67	DDDD
ATOM	8170	CA	GLY	D	19	-36.669	103.541	20.485	1.00	54.08	DDDD

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ATOM	8171	C	GLY	D	19	-37.860	103.227	19.610	1.00	56.17	DDDD
ATOM	8172	O	GLY	D	19	-38.796	102.542	20.037	1.00	54.47	DDDD
ATOM	8173	N	THR	D	20	-37.832	103.728	18.383	1.00	58.48	DDDD
ATOM	8174	CA	THR	D	20	-38.929	103.489	17.465	1.00	60.99	DDDD
ATOM	8175	CB	THR	D	20	-39.278	104.772	16.692	1.00	59.85	DDDD
ATOM	8176	OG1	THR	D	20	-38.077	105.448	16.296	1.00	59.75	DDDD
ATOM	8177	CG2	THR	D	20	-40.092	105.693	17.574	1.00	60.65	DDDD
ATOM	8178	C	THR	D	20	-38.652	102.342	16.505	1.00	63.26	DDDD
ATOM	8179	O	THR	D	20	-37.518	102.118	16.083	1.00	63.23	DDDD
ATOM	8180	N	CYS	D	21	-39.709	101.607	16.184	1.00	67.02	DDDD
ATOM	8181	CA	CYS	D	21	-39.625	100.465	15.288	1.00	70.78	DDDD
ATOM	8182	C	CYS	D	21	-39.759	100.905	13.833	1.00	71.02	DDDD
ATOM	8183	O	CYS	D	21	-40.526	101.814	13.514	1.00	72.65	DDDD
ATOM	8184	CB	CYS	D	21	-40.730	99.467	15.636	1.00	74.38	DDDD
ATOM	8185	SG	CYS	D	21	-40.598	97.851	14.811	1.00	83.40	DDDD
ATOM	8186	N	ARG	D	22	-38.999	100.257	12.958	1.00	70.21	DDDD
ATOM	8187	CA	ARG	D	22	-39.015	100.553	11.531	1.00	69.37	DDDD
ATOM	8188	CB	ARG	D	22	-37.889	101.527	11.170	1.00	67.40	DDDD
ATOM	8189	CG	ARG	D	22	-36.562	101.139	11.793	1.00	65.22	DDDD
ATOM	8190	CD	ARG	D	22	-35.373	101.304	10.869	1.00	61.38	DDDD
ATOM	8191	NE	ARG	D	22	-34.967	102.691	10.697	1.00	59.09	DDDD
ATOM	8192	CZ	ARG	D	22	-33.711	103.069	10.471	1.00	59.99	DDDD
ATOM	8193	NH1	ARG	D	22	-32.745	102.165	10.401	1.00	58.75	DDDD
ATOM	8194	NH2	ARG	D	22	-33.417	104.349	10.291	1.00	59.37	DDDD
ATOM	8195	C	ARG	D	22	-38.803	99.238	10.803	1.00	70.69	DDDD
ATOM	8196	O	ARG	D	22	-38.071	98.370	11.276	1.00	70.54	DDDD
ATOM	8197	N	PHE	D	23	-39.448	99.082	9.654	1.00	72.41	DDDD
ATOM	8198	CA	PHE	D	23	-39.305	97.855	8.888	1.00	73.60	DDDD
ATOM	8199	CB	PHE	D	23	-40.636	97.455	8.261	1.00	72.59	DDDD
ATOM	8200	CG	PHE	D	23	-40.696	96.018	7.859	1.00	72.59	DDDD
ATOM	8201	CD1	PHE	D	23	-40.911	95.027	8.812	1.00	72.31	DDDD
ATOM	8202	CD2	PHE	D	23	-40.497	95.643	6.534	1.00	72.46	DDDD
ATOM	8203	CE1	PHE	D	23	-40.926	93.683	8.455	1.00	72.00	DDDD
ATOM	8204	CE2	PHE	D	23	-40.508	94.298	6.164	1.00	71.48	DDDD
ATOM	8205	CZ	PHE	D	23	-40.723	93.317	7.127	1.00	71.69	DDDD
ATOM	8206	C	PHE	D	23	-38.275	98.053	7.791	1.00	75.51	DDDD
ATOM	8207	O	PHE	D	23	-38.310	99.051	7.068	1.00	75.62	DDDD
ATOM	8208	N	LEU	D	24	-37.349	97.109	7.669	1.00	77.58	DDDD
ATOM	8209	CA	LEU	D	24	-36.330	97.208	6.635	1.00	79.44	DDDD
ATOM	8210	CB	LEU	D	24	-35.046	96.506	7.075	1.00	80.25	DDDD
ATOM	8211	CG	LEU	D	24	-34.372	97.107	8.312	1.00	81.26	DDDD
ATOM	8212	CD1	LEU	D	24	-33.016	96.436	8.511	1.00	80.66	DDDD
ATOM	8213	CD2	LEU	D	24	-34.215	98.625	8.149	1.00	80.26	DDDD
ATOM	8214	C	LEU	D	24	-36.841	96.605	5.335	1.00	80.41	DDDD
ATOM	8215	O	LEU	D	24	-36.739	95.397	5.104	1.00	80.27	DDDD
ATOM	8216	N	VAL	D	25	-37.415	97.471	4.505	1.00	81.42	DDDD
ATOM	8217	CA	VAL	D	25	-37.956	97.099	3.205	1.00	81.36	DDDD
ATOM	8218	CB	VAL	D	25	-37.990	98.334	2.264	1.00	82.38	DDDD
ATOM	8219	CG1	VAL	D	25	-38.218	97.898	0.825	1.00	83.40	DDDD
ATOM	8220	CG2	VAL	D	25	-39.082	99.303	2.711	1.00	81.68	DDDD
ATOM	8221	C	VAL	D	25	-37.068	96.034	2.585	1.00	80.91	DDDD
ATOM	8222	O	VAL	D	25	-37.524	94.951	2.224	1.00	80.19	DDDD
ATOM	8223	N	GLN	D	26	-35.787	96.364	2.488	1.00	80.80	DDDD
ATOM	8224	CA	GLN	D	26	-34.783	95.482	1.915	1.00	81.26	DDDD
ATOM	8225	CB	GLN	D	26	-33.425	96.184	1.956	1.00	81.43	DDDD
ATOM	8226	CG	GLN	D	26	-32.359	95.524	1.112	1.00	82.08	DDDD
ATOM	8227	CD	GLN	D	26	-32.656	95.608	-0.369	1.00	82.64	DDDD
ATOM	8228	OE1	GLN	D	26	-31.834	96.091	-1.148	1.00	81.48	DDDD
ATOM	8229	NE2	GLN	D	26	-33.834	95.133	-0.770	1.00	82.43	DDDD
ATOM	8230	C	GLN	D	26	-34.685	94.115	2.611	1.00	81.21	DDDD
ATOM	8231	O	GLN	D	26	-35.312	93.143	2.189	1.00	81.29	DDDD
ATOM	8232	N	GLU	D	27	-33.895	94.048	3.678	1.00	80.48	DDDD
ATOM	8233	CA	GLU	D	27	-33.706	92.803	4.412	1.00	79.46	DDDD
ATOM	8234	CB	GLU	D	27	-32.774	93.038	5.599	1.00	78.58	DDDD
ATOM	8235	CG	GLU	D	27	-31.337	92.643	5.313	1.00	77.40	DDDD
ATOM	8236	CD	GLU	D	27	-31.198	91.160	4.990	1.00	76.89	DDDD
ATOM	8237	OE1	GLU	D	27	-31.570	90.320	5.839	1.00	75.76	DDDD
ATOM	8238	OE2	GLU	D	27	-30.715	90.833	3.886	1.00	76.13	DDDD
ATOM	8239	C	GLU	D	27	-34.993	92.136	4.883	1.00	79.19	DDDD
ATOM	8240	O	GLU	D	27	-34.964	91.038	5.447	1.00	78.22	DDDD
ATOM	8241	N	ASP	D	28	-36.121	92.798	4.648	1.00	79.02	DDDD
ATOM	8242	CA	ASP	D	28	-37.417	92.259	5.044	1.00	78.41	DDDD
ATOM	8243	CB	ASP	D	28	-37.810	91.108	4.105	1.00	80.34	DDDD
ATOM	8244	CG	ASP	D	28	-39.137	90.471	4.479	1.00	81.94	DDDD
ATOM	8245	OD1	ASP	D	28	-40.153	91.194	4.509	1.00	84.03	DDDD

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ATOM	8246	OD2	ASP	D	28	-39.166	89.249	4.741	1.00	82.05	DDDD
ATOM	8247	C	ASP	D	28	-37.401	91.773	6.494	1.00	75.99	DDDD
ATOM	8248	O	ASP	D	28	-37.272	90.579	6.760	1.00	76.07	DDDD
ATOM	8249	N	LYS	D	29	-37.525	92.712	7.425	1.00	72.95	DDDD
ATOM	8250	CA	LYS	D	29	-37.539	92.404	8.849	1.00	68.86	DDDD
ATOM	8251	CB	LYS	D	29	-36.343	91.525	9.227	1.00	69.72	DDDD
ATOM	8252	CG	LYS	D	29	-34.992	92.065	8.764	1.00	69.86	DDDD
ATOM	8253	CD	LYS	D	29	-33.807	91.362	9.443	1.00	69.46	DDDD
ATOM	8254	CE	LYS	D	29	-33.808	89.841	9.266	1.00	69.00	DDDD
ATOM	8255	NZ	LYS	D	29	-34.763	89.146	10.180	1.00	66.82	DDDD
ATOM	8256	C	LYS	D	29	-37.496	93.687	9.669	1.00	66.09	DDDD
ATOM	8257	O	LYS	D	29	-37.033	94.724	9.192	1.00	66.19	DDDD
ATOM	8258	N	PRO	D	30	-38.002	93.636	10.910	1.00	63.38	DDDD
ATOM	8259	CD	PRO	D	30	-38.920	92.593	11.391	1.00	63.81	DDDD
ATOM	8260	CA	PRO	D	30	-38.023	94.789	11.815	1.00	61.47	DDDD
ATOM	8261	CB	PRO	D	30	-39.057	94.392	12.864	1.00	61.89	DDDD
ATOM	8262	CG	PRO	D	30	-39.929	93.401	12.142	1.00	63.47	DDDD
ATOM	8263	C	PRO	D	30	-36.663	95.063	12.450	1.00	59.37	DDDD
ATOM	8264	O	PRO	D	30	-35.925	94.142	12.796	1.00	59.56	DDDD
ATOM	8265	N	ALA	D	31	-36.345	96.342	12.588	1.00	56.65	DDDD
ATOM	8266	CA	ALA	D	31	-35.100	96.787	13.195	1.00	53.19	DDDD
ATOM	8267	CB	ALA	D	31	-34.130	97.249	12.130	1.00	53.16	DDDD
ATOM	8268	C	ALA	D	31	-35.485	97.949	14.093	1.00	51.56	DDDD
ATOM	8269	O	ALA	D	31	-36.589	98.469	13.999	1.00	52.38	DDDD
ATOM	8270	N	CYS	D	32	-34.589	98.365	14.969	1.00	49.42	DDDD
ATOM	8271	CA	CYS	D	32	-34.914	99.465	15.854	1.00	45.17	DDDD
ATOM	8272	C	CYS	D	32	-33.975	100.634	15.695	1.00	43.45	DDDD
ATOM	8273	O	CYS	D	32	-32.925	100.549	15.048	1.00	40.89	DDDD
ATOM	8274	CB	CYS	D	32	-34.875	99.017	17.316	1.00	46.79	DDDD
ATOM	8275	SG	CYS	D	32	-36.091	97.757	17.788	1.00	47.52	DDDD
ATOM	8276	N	VAL	D	33	-34.394	101.738	16.295	1.00	41.42	DDDD
ATOM	8277	CA	VAL	D	33	-33.636	102.971	16.329	1.00	40.72	DDDD
ATOM	8278	CB	VAL	D	33	-34.234	104.074	15.399	1.00	38.43	DDDD
ATOM	8279	CG1	VAL	D	33	-33.268	105.244	15.292	1.00	35.19	DDDD
ATOM	8280	CG2	VAL	D	33	-34.501	103.518	14.018	1.00	35.59	DDDD
ATOM	8281	C	VAL	D	33	-33.878	103.313	17.788	1.00	42.31	DDDD
ATOM	8282	O	VAL	D	33	-35.001	103.627	18.179	1.00	42.96	DDDD
ATOM	8283	N	CYS	D	34	-32.831	103.202	18.599	1.00	44.66	DDDD
ATOM	8284	CA	CYS	D	34	-32.930	103.459	20.030	1.00	44.07	DDDD
ATOM	8285	C	CYS	D	34	-32.835	104.919	20.375	1.00	44.95	DDDD
ATOM	8286	O	CYS	D	34	-32.187	105.687	19.658	1.00	45.06	DDDD
ATOM	8287	CB	CYS	D	34	-31.795	102.779	20.787	1.00	42.78	DDDD
ATOM	8288	SG	CYS	D	34	-31.464	101.050	20.403	1.00	42.58	DDDD
ATOM	8289	N	HIS	D	35	-33.460	105.275	21.497	1.00	46.05	DDDD
ATOM	8290	CA	HIS	D	35	-33.404	106.627	22.035	1.00	48.44	DDDD
ATOM	8291	CB	HIS	D	35	-34.402	106.799	23.187	1.00	51.02	DDDD
ATOM	8292	CG	HIS	D	35	-35.825	106.524	22.812	1.00	56.71	DDDD
ATOM	8293	CD2	HIS	D	35	-36.854	106.020	23.534	1.00	58.20	DDDD
ATOM	8294	ND1	HIS	D	35	-36.343	106.825	21.567	1.00	57.83	DDDD
ATOM	8295	CE1	HIS	D	35	-37.628	106.518	21.539	1.00	57.88	DDDD
ATOM	8296	NE2	HIS	D	35	-37.964	106.029	22.720	1.00	60.41	DDDD
ATOM	8297	C	HIS	D	35	-31.986	106.696	22.597	1.00	49.44	DDDD
ATOM	8298	O	HIS	D	35	-31.441	105.675	23.026	1.00	50.17	DDDD
ATOM	8299	N	SER	D	36	-31.374	107.870	22.611	1.00	50.47	DDDD
ATOM	8300	CA	SER	D	36	-30.017	107.956	23.135	1.00	52.07	DDDD
ATOM	8301	CB	SER	D	36	-29.575	109.410	23.239	1.00	53.76	DDDD
ATOM	8302	OG	SER	D	36	-30.354	110.087	24.202	1.00	57.81	DDDD
ATOM	8303	C	SER	D	36	-29.893	107.288	24.510	1.00	52.10	DDDD
ATOM	8304	O	SER	D	36	-30.804	107.376	25.347	1.00	51.79	DDDD
ATOM	8305	N	GLY	D	37	-28.764	106.607	24.723	1.00	51.08	DDDD
ATOM	8306	CA	GLY	D	37	-28.517	105.939	25.988	1.00	47.35	DDDD
ATOM	8307	C	GLY	D	37	-28.921	104.481	26.050	1.00	45.11	DDDD
ATOM	8308	O	GLY	D	37	-28.979	103.901	27.133	1.00	46.30	DDDD
ATOM	8309	N	TYR	D	38	-29.214	103.879	24.906	1.00	42.33	DDDD
ATOM	8310	CA	TYR	D	38	-29.602	102.476	24.883	1.00	39.79	DDDD
ATOM	8311	CB	TYR	D	38	-31.118	102.328	24.854	1.00	38.34	DDDD
ATOM	8312	CG	TYR	D	38	-31.750	102.721	26.155	1.00	37.30	DDDD
ATOM	8313	CD1	TYR	D	38	-32.025	104.057	26.441	1.00	34.12	DDDD
ATOM	8314	CE1	TYR	D	38	-32.526	104.428	27.680	1.00	34.87	DDDD
ATOM	8315	CD2	TYR	D	38	-32.002	101.759	27.145	1.00	37.03	DDDD
ATOM	8316	CE2	TYR	D	38	-32.502	102.120	28.389	1.00	34.03	DDDD
ATOM	8317	CZ	TYR	D	38	-32.756	103.456	28.652	1.00	36.66	DDDD
ATOM	8318	OH	TYR	D	38	-33.197	103.831	29.902	1.00	40.47	DDDD
ATOM	8319	C	TYR	D	38	-28.994	101.723	23.727	1.00	38.63	DDDD
ATOM	8320	O	TYR	D	38	-28.595	102.307	22.722	1.00	39.82	DDDD

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ATOM	8321	N	VAL	D	39	-28.914	100.412	23.883	1.00	37.56	DDDD
ATOM	8322	CA	VAL	D	39	-28.325	99.570	22.860	1.00	36.13	DDDD
ATOM	8323	CB	VAL	D	39	-26.836	99.315	23.145	1.00	35.50	DDDD
ATOM	8324	CG1	VAL	D	39	-26.062	100.616	23.040	1.00	34.34	DDDD
ATOM	8325	CG2	VAL	D	39	-26.666	98.724	24.539	1.00	33.74	DDDD
ATOM	8326	C	VAL	D	39	-29.053	98.254	22.833	1.00	36.62	DDDD
ATOM	8327	O	VAL	D	39	-29.893	97.978	23.695	1.00	34.82	DDDD
ATOM	8328	N	GLY	D	40	-28.734	97.445	21.831	1.00	38.63	DDDD
ATOM	8329	CA	GLY	D	40	-29.371	96.145	21.704	1.00	41.20	DDDD
ATOM	8330	C	GLY	D	40	-30.275	96.007	20.497	1.00	42.51	DDDD
ATOM	8331	O	GLY	D	40	-30.870	96.979	20.025	1.00	42.84	DDDD
ATOM	8332	N	ALA	D	41	-30.369	94.786	19.988	1.00	43.02	DDDD
ATOM	8333	CA	ALA	D	41	-31.223	94.498	18.847	1.00	43.79	DDDD
ATOM	8334	CB	ALA	D	41	-31.259	93.014	18.620	1.00	42.04	DDDD
ATOM	8335	C	ALA	D	41	-32.644	95.023	19.113	1.00	45.73	DDDD
ATOM	8336	O	ALA	D	41	-33.404	95.317	18.189	1.00	46.94	DDDD
ATOM	8337	N	ARG	D	42	-32.996	95.132	20.388	1.00	44.95	DDDD
ATOM	8338	CA	ARG	D	42	-34.312	95.612	20.763	1.00	43.65	DDDD
ATOM	8339	CB	ARG	D	42	-35.107	94.495	21.454	1.00	44.34	DDDD
ATOM	8340	CG	ARG	D	42	-35.398	93.264	20.567	1.00	47.09	DDDD
ATOM	8341	CD	ARG	D	42	-36.405	92.301	21.242	1.00	45.94	DDDD
ATOM	8342	NE	ARG	D	42	-37.698	92.953	21.431	1.00	47.03	DDDD
ATOM	8343	CZ	ARG	D	42	-38.704	92.458	22.137	1.00	45.48	DDDD
ATOM	8344	NH1	ARG	D	42	-38.590	91.286	22.737	1.00	45.23	DDDD
ATOM	8345	NH2	ARG	D	42	-39.820	93.156	22.260	1.00	43.31	DDDD
ATOM	8346	C	ARG	D	42	-34.210	96.821	21.680	1.00	42.39	DDDD
ATOM	8347	O	ARG	D	42	-35.172	97.174	22.358	1.00	41.67	DDDD
ATOM	8348	N	CYS	D	43	-33.040	97.449	21.701	1.00	41.24	DDDD
ATOM	8349	CA	CYS	D	43	-32.826	98.620	22.540	1.00	39.91	DDDD
ATOM	8350	C	CYS	D	43	-33.230	98.325	23.972	1.00	38.26	DDDD
ATOM	8351	O	CYS	D	43	-33.777	99.183	24.672	1.00	38.48	DDDD
ATOM	8352	CB	CYS	D	43	-33.660	99.774	22.017	1.00	41.36	DDDD
ATOM	8353	SG	CYS	D	43	-33.299	100.209	20.296	1.00	42.36	DDDD
ATOM	8354	N	GLU	D	44	-32.938	97.112	24.409	1.00	37.00	DDDD
ATOM	8355	CA	GLU	D	44	-33.314	96.672	25.740	1.00	37.44	DDDD
ATOM	8356	CB	GLU	D	44	-33.458	95.144	25.757	1.00	37.01	DDDD
ATOM	8357	CG	GLU	D	44	-32.149	94.344	25.580	1.00	39.98	DDDD
ATOM	8358	CD	GLU	D	44	-31.745	94.094	24.123	1.00	43.39	DDDD
ATOM	8359	OE1	GLU	D	44	-30.819	93.279	23.897	1.00	42.21	DDDD
ATOM	8360	OE2	GLU	D	44	-32.341	94.700	23.202	1.00	45.04	DDDD
ATOM	8361	C	GLU	D	44	-32.368	97.093	26.851	1.00	37.12	DDDD
ATOM	8362	O	GLU	D	44	-32.782	97.203	28.007	1.00	37.92	DDDD
ATOM	8363	N	HIS	D	45	-31.112	97.351	26.495	1.00	36.22	DDDD
ATOM	8364	CA	HIS	D	45	-30.082	97.700	27.469	1.00	34.67	DDDD
ATOM	8365	CB	HIS	D	45	-28.870	96.813	27.229	1.00	32.81	DDDD
ATOM	8366	CG	HIS	D	45	-29.105	95.376	27.551	1.00	31.26	DDDD
ATOM	8367	CD2	HIS	D	45	-29.984	94.786	28.395	1.00	32.33	DDDD
ATOM	8368	ND1	HIS	D	45	-28.373	94.355	26.983	1.00	30.82	DDDD
ATOM	8369	CE1	HIS	D	45	-28.794	93.198	27.461	1.00	32.42	DDDD
ATOM	8370	NE2	HIS	D	45	-29.771	93.430	28.321	1.00	31.21	DDDD
ATOM	8371	C	HIS	D	45	-29.602	99.142	27.545	1.00	36.34	DDDD
ATOM	8372	O	HIS	D	45	-29.343	99.788	26.528	1.00	36.40	DDDD
ATOM	8373	N	ALA	D	46	-29.468	99.638	28.770	1.00	38.10	DDDD
ATOM	8374	CA	ALA	D	46	-28.963	100.984	28.993	1.00	39.27	DDDD
ATOM	8375	CB	ALA	D	46	-29.182	101.369	30.442	1.00	36.00	DDDD
ATOM	8376	C	ALA	D	46	-27.466	100.863	28.674	1.00	42.15	DDDD
ATOM	8377	O	ALA	D	46	-26.837	99.856	29.034	1.00	43.18	DDDD
ATOM	8378	N	ASP	D	47	-26.886	101.840	27.981	1.00	44.28	DDDD
ATOM	8379	CA	ASP	D	47	-25.464	101.733	27.660	1.00	48.13	DDDD
ATOM	8380	CB	ASP	D	47	-25.104	102.533	26.394	1.00	50.74	DDDD
ATOM	8381	CG	ASP	D	47	-25.292	104.040	26.554	1.00	55.45	DDDD
ATOM	8382	OD1	ASP	D	47	-24.870	104.779	25.628	1.00	56.10	DDDD
ATOM	8383	OD2	ASP	D	47	-25.854	104.490	27.584	1.00	55.78	DDDD
ATOM	8384	C	ASP	D	47	-24.634	102.187	28.846	1.00	48.88	DDDD
ATOM	8385	O	ASP	D	47	-24.125	103.304	28.890	1.00	50.24	DDDD
ATOM	8386	N	LEU	D	48	-24.502	101.291	29.813	1.00	49.79	DDDD
ATOM	8387	CA	LEU	D	48	-23.777	101.570	31.033	1.00	50.03	DDDD
ATOM	8388	CB	LEU	D	48	-23.448	100.262	31.738	1.00	43.92	DDDD
ATOM	8389	CG	LEU	D	48	-24.725	99.473	32.024	1.00	39.21	DDDD
ATOM	8390	CD1	LEU	D	48	-24.414	98.269	32.907	1.00	38.29	DDDD
ATOM	8391	CD2	LEU	D	48	-25.738	100.380	32.686	1.00	33.84	DDDD
ATOM	8392	C	LEU	D	48	-22.533	102.425	30.858	1.00	54.42	DDDD
ATOM	8393	O	LEU	D	48	-22.193	103.204	31.743	1.00	53.89	DDDD
ATOM	8394	N	LEU	D	49	-21.846	102.299	29.728	1.00	59.71	DDDD
ATOM	8395	CA	LEU	D	49	-20.662	103.136	29.519	1.00	65.06	DDDD

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ATOM	8396	CB	LEU	D	49	-19.905	102.709	28.254	1.00	65.35	DDDD
ATOM	8397	CG	LEU	D	49	-19.195	101.362	28.421	1.00	67.09	DDDD
ATOM	8398	CD1	LEU	D	49	-18.357	101.055	27.185	1.00	66.90	DDDD
ATOM	8399	CD2	LEU	D	49	-18.317	101.408	29.675	1.00	65.93	DDDD
ATOM	8400	C	LEU	D	49	-21.076	104.613	29.437	1.00	67.57	DDDD
ATOM	8401	O	LEU	D	49	-21.107	105.222	28.355	1.00	67.26	DDDD
ATOM	8402	N	ALA	D	50	-21.394	105.151	30.615	1.00	69.32	DDDD
ATOM	8403	CA	ALA	D	50	-21.837	106.526	30.842	1.00	70.60	DDDD
ATOM	8404	CB	ALA	D	50	-22.284	107.183	29.535	1.00	71.26	DDDD
ATOM	8405	C	ALA	D	50	-23.014	106.444	31.815	1.00	71.55	DDDD
ATOM	8406	OT1	ALA	D	50	-23.772	105.455	31.713	1.00	72.37	DDDD
ATOM	8407	OT2	ALA	D	50	-23.177	107.357	32.656	1.00	71.45	DDDD
ATOM	8408	OH2	WAT	H	740	-16.818	109.746	64.857	1.00	65.87	HHHH
ATOM	8409	OH2	WAT	H	742	10.566	57.569	26.005	1.00	35.08	HHHH
ATOM	8410	OH2	WAT	H	743	-37.230	105.392	26.683	1.00	30.20	HHHH
ATOM	8411	OH2	WAT	H	744	16.707	58.583	53.435	1.00	78.12	HHHH
ATOM	8412	OH2	WAT	H	745	7.669	41.566	68.779	1.00	54.86	HHHH
ATOM	8413	OH2	WAT	H	746	12.553	37.341	42.264	1.00	28.70	HHHH
ATOM	8414	OH2	WAT	H	747	20.286	34.395	34.019	1.00	29.50	HHHH
ATOM	8415	OH2	WAT	H	748	-16.020	72.724	53.375	1.00	48.72	HHHH
ATOM	8416	OH2	WAT	H	749	-27.461	97.574	30.470	1.00	23.20	HHHH
ATOM	8417	OH2	WAT	H	750	-5.903	30.107	69.838	1.00	34.73	HHHH
ATOM	8418	OH2	WAT	H	751	20.125	44.739	57.981	1.00	28.84	HHHH
ATOM	8419	OH2	WAT	H	752	22.847	36.377	13.283	1.00	40.42	HHHH
ATOM	8420	OH2	WAT	H	753	26.486	32.138	36.888	1.00	36.41	HHHH
ATOM	8421	OH2	WAT	H	754	-26.065	97.686	13.932	1.00	29.48	HHHH
ATOM	8422	OH2	WAT	H	755	-7.275	72.234	27.479	1.00	33.04	HHHH
ATOM	8423	OH2	WAT	H	756	-18.213	74.386	12.461	1.00	34.92	HHHH
ATOM	8424	OH2	WAT	H	757	-23.688	98.948	16.215	1.00	36.01	HHHH
ATOM	8425	OH2	WAT	H	758	-31.330	104.901	8.663	1.00	52.95	HHHH
ATOM	8426	OH2	WAT	H	759	-4.616	71.623	32.799	1.00	43.51	HHHH
ATOM	8427	OH2	WAT	H	760	10.202	34.571	47.087	1.00	30.05	HHHH
ATOM	8428	OH2	WAT	H	761	-27.604	93.007	50.788	1.00	39.57	HHHH
ATOM	8429	OH2	WAT	H	762	7.639	48.007	47.007	1.00	32.64	HHHH
ATOM	8430	OH2	WAT	H	763	21.476	23.966	19.021	1.00	33.79	HHHH
ATOM	8431	OH2	WAT	H	764	-33.451	100.613	52.546	1.00	41.02	HHHH
ATOM	8432	OH2	WAT	H	765	-26.914	83.917	33.695	1.00	53.62	HHHH
ATOM	8433	OH2	WAT	H	766	13.701	30.669	51.617	1.00	36.79	HHHH
ATOM	8434	OH2	WAT	H	767	20.283	45.200	48.577	1.00	41.53	HHHH
ATOM	8435	OH2	WAT	H	768	8.454	26.965	61.736	1.00	39.43	HHHH
ATOM	8436	OH2	WAT	H	769	-13.004	97.432	-4.461	1.00	50.73	HHHH
ATOM	8437	OH2	WAT	H	770	-22.939	79.722	35.832	1.00	44.14	HHHH
ATOM	8438	OH2	WAT	H	771	-20.863	78.338	31.761	1.00	43.71	HHHH
ATOM	8439	OH2	WAT	H	772	20.144	26.267	17.744	1.00	60.93	HHHH
ATOM	8440	OH2	WAT	H	773	27.565	26.972	33.677	1.00	40.74	HHHH
ATOM	8441	OH2	WAT	H	774	-30.870	90.953	29.223	1.00	48.98	HHHH
ATOM	8442	OH2	WAT	H	775	35.056	40.840	56.428	1.00	45.56	HHHH
ATOM	8443	OH2	WAT	H	776	16.842	46.414	11.886	1.00	40.75	HHHH
ATOM	8444	OH2	WAT	H	777	-15.767	85.221	43.869	1.00	40.10	HHHH
ATOM	8445	OH2	WAT	H	778	17.597	33.745	33.893	1.00	32.88	HHHH
ATOM	8446	OH2	WAT	H	779	-13.321	94.071	27.046	1.00	35.11	HHHH
ATOM	8447	OH2	WAT	H	780	14.806	49.089	12.247	1.00	66.29	HHHH
ATOM	8448	OH2	WAT	H	781	-32.575	99.692	12.244	1.00	56.50	HHHH
ATOM	8449	OH2	WAT	H	782	16.861	32.982	10.021	1.00	53.53	HHHH
ATOM	8450	OH2	WAT	H	783	-22.264	98.430	-2.454	1.00	32.07	HHHH
ATOM	8451	OH2	WAT	H	784	1.826	15.243	62.144	1.00	48.96	HHHH
ATOM	8452	OH2	WAT	H	785	15.727	32.508	52.253	1.00	49.53	HHHH
ATOM	8453	OH2	WAT	H	786	18.885	24.190	19.371	1.00	41.09	HHHH
ATOM	8454	OH2	WAT	H	787	-2.464	61.285	32.014	1.00	43.20	HHHH
ATOM	8455	OH2	WAT	H	788	-27.629	104.018	5.612	1.00	41.25	HHHH
ATOM	8456	OH2	WAT	H	789	-8.056	91.739	6.150	1.00	30.04	HHHH
ATOM	8457	OH2	WAT	H	790	-33.810	107.007	42.613	1.00	49.42	HHHH
ATOM	8458	OH2	WAT	H	791	-5.294	82.585	19.018	1.00	44.65	HHHH
ATOM	8459	OH2	WAT	H	792	-8.330	86.114	1.690	1.00	49.17	HHHH
ATOM	8460	OH2	WAT	H	793	-8.504	95.395	10.053	1.00	47.77	HHHH
ATOM	8461	OH2	WAT	H	794	-3.950	68.822	34.925	1.00	49.58	HHHH
ATOM	8462	OH2	WAT	H	795	-21.411	97.951	16.477	1.00	35.53	HHHH
ATOM	8463	OH2	WAT	H	796	-17.148	78.337	8.305	1.00	58.99	HHHH
ATOM	8464	OH2	WAT	H	797	-21.649	104.845	25.689	1.00	55.20	HHHH
ATOM	8465	OH2	WAT	H	798	-23.297	106.354	11.263	1.00	28.02	HHHH
ATOM	8466	OH2	WAT	H	799	-22.945	99.868	21.301	1.00	26.89	HHHH
ATOM	8467	OH2	WAT	H	801	11.097	34.016	36.496	1.00	21.96	HHHH
ATOM	8468	OH2	WAT	H	802	-20.399	85.072	22.940	1.00	28.78	HHHH
ATOM	8469	OH2	WAT	H	803	-25.409	83.817	20.569	1.00	41.42	HHHH
ATOM	8470	OH2	WAT	H	804	-26.247	81.426	17.171	1.00	36.58	HHHH

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ATOM	8471	OH2	WAT	H	805	6.105	34.376	34.636	1.00	51.06	HHHH
ATOM	8472	OH2	WAT	H	806	9.180	47.730	35.425	1.00	50.40	HHHH
ATOM	8473	OH2	WAT	H	807	8.492	39.682	66.009	1.00	38.44	HHHH
ATOM	8474	OH2	WAT	H	808	-28.780	103.966	48.796	1.00	55.26	HHHH
ATOM	8475	OH2	WAT	H	809	25.710	27.016	49.667	1.00	41.37	HHHH
ATOM	8476	OH2	WAT	H	810	15.784	50.537	35.731	1.00	44.33	HHHH
ATOM	8477	OH2	WAT	H	811	-13.405	74.331	53.995	1.00	59.27	HHHH
ATOM	8478	OH2	WAT	H	812	-15.200	79.651	-4.392	1.00	56.52	HHHH
ATOM	8479	OH2	WAT	H	813	-21.907	107.723	9.724	1.00	31.14	HHHH
ATOM	8480	OH2	WAT	H	814	28.443	33.630	47.562	1.00	35.33	HHHH
ATOM	8481	OH2	WAT	H	815	18.660	51.698	35.079	1.00	51.60	HHHH
ATOM	8482	OH2	WAT	H	816	1.312	55.700	21.645	1.00	51.21	HHHH
ATOM	8483	OH2	WAT	H	817	-3.255	96.961	15.474	1.00	56.67	HHHH
ATOM	8484	OH2	WAT	H	818	-29.356	92.821	21.844	1.00	40.99	HHHH
ATOM	8485	OH2	WAT	H	819	1.564	85.668	18.299	1.00	47.82	HHHH
ATOM	8486	OH2	WAT	H	820	-42.649	95.130	25.046	1.00	57.55	HHHH
ATOM	8487	C1	NAG	E	600	3.856	25.751	26.645	1.00	94.49	EEEE
ATOM	8488	C2	NAG	E	600	3.561	24.657	27.658	1.00	97.67	EEEE
ATOM	8489	N2	NAG	E	600	4.785	24.076	28.180	1.00	97.31	EEEE
ATOM	8490	C7	NAG	E	600	5.532	24.756	29.047	1.00	96.73	EEEE
ATOM	8491	O7	NAG	E	600	6.712	25.030	28.834	1.00	96.68	EEEE
ATOM	8492	C8	NAG	E	600	4.883	25.190	30.355	1.00	96.85	EEEE
ATOM	8493	C3	NAG	E	600	2.703	23.608	26.964	1.00	100.99	EEEE
ATOM	8494	O3	NAG	E	600	2.396	22.558	27.872	1.00	101.09	EEEE
ATOM	8495	C4	NAG	E	600	1.404	24.256	26.451	1.00	103.26	EEEE
ATOM	8496	O4	NAG	E	600	0.703	23.308	25.617	1.00	107.29	EEEE
ATOM	8497	C5	NAG	E	600	1.677	25.553	25.637	1.00	102.29	EEEE
ATOM	8498	O5	NAG	E	600	2.632	26.414	26.312	1.00	97.83	EEEE
ATOM	8499	C6	NAG	E	600	0.419	26.397	25.447	1.00	104.24	EEEE
ATOM	8500	O6	NAG	E	600	-0.598	25.648	24.746	1.00	107.07	EEEE
ATOM	8501	C1	FUC	E	601	-1.876	26.245	24.725	1.00	108.16	EEEE
ATOM	8502	C2	FUC	E	601	-2.545	26.253	26.114	1.00	108.88	EEEE
ATOM	8503	O2	FUC	E	601	-2.322	25.011	26.767	1.00	108.88	EEEE
ATOM	8504	C3	FUC	E	601	-2.004	27.395	26.979	1.00	109.58	EEEE
ATOM	8505	O3	FUC	E	601	-2.711	27.451	28.210	1.00	109.90	EEEE
ATOM	8506	C4	FUC	E	601	-2.141	28.724	26.232	1.00	109.35	EEEE
ATOM	8507	O4	FUC	E	601	-3.512	29.028	26.016	1.00	108.85	EEEE
ATOM	8508	C5	FUC	E	601	-1.409	28.637	24.888	1.00	109.36	EEEE
ATOM	8509	O5	FUC	E	601	-1.917	27.534	24.099	1.00	108.88	EEEE
ATOM	8510	C6	FUC	E	601	-1.579	29.894	24.055	1.00	109.41	EEEE
ATOM	8511	C1	NAG	E	602	-0.510	22.836	26.094	1.00	109.67	EEEE
ATOM	8512	C2	NAG	E	602	-1.292	22.170	24.960	1.00	110.65	EEEE
ATOM	8513	N2	NAG	E	602	-1.576	23.143	23.923	1.00	110.47	EEEE
ATOM	8514	C7	NAG	E	602	-1.152	22.937	22.680	1.00	110.25	EEEE
ATOM	8515	O7	NAG	E	602	-1.881	22.501	21.792	1.00	110.89	EEEE
ATOM	8516	C8	NAG	E	602	0.298	23.269	22.372	1.00	110.23	EEEE
ATOM	8517	C3	NAG	E	602	-2.600	21.583	25.504	1.00	111.77	EEEE
ATOM	8518	O3	NAG	E	602	-3.247	20.834	24.483	1.00	112.54	EEEE
ATOM	8519	C4	NAG	E	602	-2.331	20.675	26.714	1.00	111.88	EEEE
ATOM	8520	O4	NAG	E	602	-3.566	20.301	27.310	1.00	111.91	EEEE
ATOM	8521	C5	NAG	E	602	-1.460	21.402	27.748	1.00	111.75	EEEE
ATOM	8522	O5	NAG	E	602	-0.248	21.881	27.130	1.00	110.62	EEEE
ATOM	8523	C6	NAG	E	602	-1.046	20.513	28.903	1.00	112.04	EEEE
ATOM	8524	O6	NAG	E	602	-0.156	21.195	29.774	1.00	112.59	EEEE
ATOM	8525	C1	NAG	E	650	19.802	47.729	52.932	1.00	44.29	EEEE
ATOM	8526	C2	NAG	E	650	20.211	47.062	51.614	1.00	45.81	EEEE
ATOM	8527	N2	NAG	E	650	20.943	45.837	51.863	1.00	44.01	EEEE
ATOM	8528	C7	NAG	E	650	20.331	44.661	51.779	1.00	43.76	EEEE
ATOM	8529	O7	NAG	E	650	19.115	44.514	51.948	1.00	43.05	EEEE
ATOM	8530	C8	NAG	E	650	21.206	43.463	51.459	1.00	41.16	EEEE
ATOM	8531	C3	NAG	E	650	21.085	48.022	50.820	1.00	48.38	EEEE
ATOM	8532	O3	NAG	E	650	21.420	47.440	49.571	1.00	49.01	EEEE
ATOM	8533	C4	NAG	E	650	20.367	49.354	50.602	1.00	49.61	EEEE
ATOM	8534	O4	NAG	E	650	21.283	50.299	50.011	1.00	56.78	EEEE
ATOM	8535	C5	NAG	E	650	19.883	49.905	51.941	1.00	49.60	EEEE
ATOM	8536	O5	NAG	E	650	19.079	48.925	52.645	1.00	47.73	EEEE
ATOM	8537	C6	NAG	E	650	19.030	51.144	51.767	1.00	51.12	EEEE
ATOM	8538	O6	NAG	E	650	17.667	50.805	51.556	1.00	52.73	EEEE
ATOM	8539	C1	NAG	E	651	21.168	50.533	48.654	1.00	63.66	EEEE
ATOM	8540	C2	NAG	E	651	21.419	52.002	48.358	1.00	66.59	EEEE
ATOM	8541	N2	NAG	E	651	20.477	52.817	49.097	1.00	66.55	EEEE
ATOM	8542	C7	NAG	E	651	20.908	53.658	50.036	1.00	66.73	EEEE
ATOM	8543	O7	NAG	E	651	21.956	53.485	50.680	1.00	64.24	EEEE
ATOM	8544	C8	NAG	E	651	20.042	54.883	50.298	1.00	65.12	EEEE
ATOM	8545	C3	NAG	E	651	21.267	52.222	46.851	1.00	71.01	EEEE

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ATOM	8546	O3	NAG	E	651	21.522	53.581	46.532	1.00	71.04	EEEE
ATOM	8547	C4	NAG	E	651	22.238	51.305	46.085	1.00	74.63	EEEE
ATOM	8548	O4	NAG	E	651	22.010	51.428	44.660	1.00	83.11	EEEE
ATOM	8549	C5	NAG	E	651	22.018	49.848	46.531	1.00	71.58	EEEE
ATOM	8550	O5	NAG	E	651	22.140	49.738	47.968	1.00	67.17	EEEE
ATOM	8551	C6	NAG	E	651	23.015	48.883	45.932	1.00	71.90	EEEE
ATOM	8552	O6	NAG	E	651	23.088	47.691	46.696	1.00	74.00	EEEE
ATOM	8553	C1	MAN	E	652	23.076	51.133	43.808	1.00	90.93	EEEE
ATOM	8554	C2	MAN	E	652	22.551	50.874	42.381	1.00	94.12	EEEE
ATOM	8555	O2	MAN	E	652	21.721	51.954	41.973	1.00	95.19	EEEE
ATOM	8556	C3	MAN	E	652	23.709	50.707	41.379	1.00	96.77	EEEE
ATOM	8557	O3	MAN	E	652	23.180	50.668	40.033	1.00	101.24	EEEE
ATOM	8558	C4	MAN	E	652	24.687	51.878	41.506	1.00	95.95	EEEE
ATOM	8559	O4	MAN	E	652	25.815	51.653	40.674	1.00	95.94	EEEE
ATOM	8560	C5	MAN	E	652	25.135	52.029	42.964	1.00	94.94	EEEE
ATOM	8561	O5	MAN	E	652	23.986	52.247	43.815	1.00	93.08	EEEE
ATOM	8562	C6	MAN	E	652	26.076	53.199	43.166	1.00	94.73	EEEE
ATOM	8563	O6	MAN	E	652	27.414	52.837	42.851	1.00	94.94	EEEE
ATOM	8564	C1	MAN	E	653	23.275	49.475	39.286	1.00	104.77	EEEE
ATOM	8565	C2	MAN	E	653	22.719	48.253	40.046	1.00	106.30	EEEE
ATOM	8566	O2	MAN	E	653	22.358	47.233	39.123	1.00	105.68	EEEE
ATOM	8567	C3	MAN	E	653	23.748	47.705	41.040	1.00	107.40	EEEE
ATOM	8568	O3	MAN	E	653	23.266	46.494	41.608	1.00	107.05	EEEE
ATOM	8569	C4	MAN	E	653	25.089	47.457	40.338	1.00	107.79	EEEE
ATOM	8570	O4	MAN	E	653	26.058	47.031	41.287	1.00	109.07	EEEE
ATOM	8571	C5	MAN	E	653	25.577	48.739	39.648	1.00	107.06	EEEE
ATOM	8572	O5	MAN	E	653	24.572	49.227	38.727	1.00	105.89	EEEE
ATOM	8573	C6	MAN	E	653	26.844	48.494	38.836	1.00	106.71	EEEE
ATOM	8574	O6	MAN	E	653	27.817	49.506	39.059	1.00	105.37	EEEE
ATOM	8575	C1	NAG	F	600	-9.027	106.864	19.712	1.00	83.03	FFFF
ATOM	8576	C2	NAG	F	600	-9.461	108.204	20.295	1.00	86.98	FFFF
ATOM	8577	N2	NAG	F	600	-10.814	108.530	19.890	1.00	86.84	FFFF
ATOM	8578	C7	NAG	F	600	-11.763	108.652	20.815	1.00	86.33	FFFF
ATOM	8579	O7	NAG	F	600	-12.407	107.694	21.249	1.00	84.27	FFFF
ATOM	8580	C8	NAG	F	600	-12.030	110.050	21.348	1.00	86.65	FFFF
ATOM	8581	C3	NAG	F	600	-8.482	109.280	19.838	1.00	90.68	FFFF
ATOM	8582	O3	NAG	F	600	-8.826	110.516	20.443	1.00	89.20	FFFF
ATOM	8583	C4	NAG	F	600	-7.061	108.888	20.250	1.00	94.60	FFFF
ATOM	8584	O4	NAG	F	600	-6.112	109.815	19.684	1.00	102.59	FFFF
ATOM	8585	C5	NAG	F	600	-6.709	107.458	19.802	1.00	92.78	FFFF
ATOM	8586	O5	NAG	F	600	-7.734	106.524	20.215	1.00	87.50	FFFF
ATOM	8587	C6	NAG	F	600	-5.402	106.979	20.419	1.00	93.97	FFFF
ATOM	8588	O6	NAG	F	600	-5.545	106.862	21.853	1.00	95.37	FFFF
ATOM	8589	C1	FUC	F	601	-4.307	106.767	22.511	1.00	95.80	FFFF
ATOM	8590	C2	FUC	F	601	-4.510	106.855	24.030	1.00	95.52	FFFF
ATOM	8591	O2	FUC	F	601	-5.304	107.990	24.346	1.00	95.96	FFFF
ATOM	8592	C3	FUC	F	601	-5.195	105.592	24.554	1.00	95.29	FFFF
ATOM	8593	O3	FUC	F	601	-5.238	105.635	25.972	1.00	95.18	FFFF
ATOM	8594	C4	FUC	F	601	-4.450	104.331	24.100	1.00	94.60	FFFF
ATOM	8595	O4	FUC	F	601	-3.195	104.250	24.755	1.00	94.89	FFFF
ATOM	8596	C5	FUC	F	601	-4.241	104.346	22.582	1.00	94.87	FFFF
ATOM	8597	O5	FUC	F	601	-3.592	105.573	22.178	1.00	95.49	FFFF
ATOM	8598	C6	FUC	F	601	-3.368	103.201	22.104	1.00	94.22	FFFF
ATOM	8599	C1	NAG	F	602	-5.177	110.318	20.577	1.00	109.41	FFFF
ATOM	8600	C2	NAG	F	602	-4.001	110.955	19.821	1.00	112.17	FFFF
ATOM	8601	N2	NAG	F	602	-3.288	109.935	19.073	1.00	113.47	FFFF
ATOM	8602	C7	NAG	F	602	-2.798	110.201	17.865	1.00	114.42	FFFF
ATOM	8603	O7	NAG	F	602	-3.411	109.951	16.825	1.00	114.69	FFFF
ATOM	8604	C8	NAG	F	602	-1.413	110.830	17.793	1.00	114.38	FFFF
ATOM	8605	C3	NAG	F	602	-3.033	111.623	20.807	1.00	114.27	FFFF
ATOM	8606	O3	NAG	F	602	-2.089	112.402	20.084	1.00	114.19	FFFF
ATOM	8607	C4	NAG	F	602	-3.765	112.524	21.821	1.00	115.81	FFFF
ATOM	8608	O4	NAG	F	602	-2.852	112.906	22.876	1.00	119.28	FFFF
ATOM	8609	C5	NAG	F	602	-4.969	111.792	22.436	1.00	114.33	FFFF
ATOM	8610	O5	NAG	F	602	-5.830	111.295	21.395	1.00	112.02	FFFF
ATOM	8611	C6	NAG	F	602	-5.817	112.681	23.328	1.00	113.69	FFFF
ATOM	8612	O6	NAG	F	602	-5.965	112.114	24.622	1.00	112.81	FFFF
ATOM	8613	C1	MAN	F	603	-1.979	113.954	22.617	1.00	121.42	FFFF
ATOM	8614	C2	MAN	F	603	-2.749	115.283	22.584	1.00	122.42	FFFF
ATOM	8615	O2	MAN	F	603	-3.464	115.456	23.802	1.00	122.11	FFFF
ATOM	8616	C3	MAN	F	603	-1.769	116.441	22.385	1.00	122.96	FFFF
ATOM	8617	O3	MAN	F	603	-2.466	117.677	22.453	1.00	122.92	FFFF
ATOM	8618	C4	MAN	F	603	-0.675	116.394	23.462	1.00	123.19	FFFF
ATOM	8619	O4	MAN	F	603	0.296	117.400	23.209	1.00	123.24	FFFF
ATOM	8620	C5	MAN	F	603	-0.001	115.011	23.473	1.00	122.91	FFFF

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ATOM	8621	O5	MAN	F	603	-0.993	113.976	23.662	1.00122.20	FFFF
ATOM	8622	C6	MAN	F	603	1.014	114.868	24.597	1.00122.79	FFFF
ATOM	8623	O6	MAN	F	603	1.757	113.663	24.477	1.00122.33	FFFF
ATOM	8624	C1	NAG	F	630	-6.213	78.795	-10.242	1.00 98.75	FFFF
ATOM	8625	C2	NAG	F	630	-6.835	77.432	-10.544	1.00100.36	FFFF
ATOM	8626	N2	NAG	F	630	-7.896	77.149	-9.594	1.00100.86	FFFF
ATOM	8627	C7	NAG	F	630	-9.060	76.666	-10.017	1.00101.08	FFFF
ATOM	8628	O7	NAG	F	630	-9.215	75.489	-10.347	1.00101.12	FFFF
ATOM	8629	C8	NAG	F	630	-10.231	77.636	-10.087	1.00100.63	FFFF
ATOM	8630	C3	NAG	F	630	-5.749	76.355	-10.448	1.00101.40	FFFF
ATOM	8631	O3	NAG	F	630	-6.284	75.107	-10.864	1.00101.56	FFFF
ATOM	8632	C4	NAG	F	630	-4.528	76.716	-11.317	1.00101.71	FFFF
ATOM	8633	O4	NAG	F	630	-3.463	75.813	-11.040	1.00102.98	FFFF
ATOM	8634	C5	NAG	F	630	-4.056	78.156	-11.044	1.00101.26	FFFF
ATOM	8635	O5	NAG	F	630	-5.162	79.077	-11.175	1.00100.21	FFFF
ATOM	8636	C6	NAG	F	630	-2.974	78.613	-12.009	1.00101.02	FFFF
ATOM	8637	O6	NAG	F	630	-1.864	79.171	-11.319	1.00100.24	FFFF
ATOM	8638	C1	NAG	F	650	-39.620	85.665	29.716	1.00 58.68	FFFF
ATOM	8639	C2	NAG	F	650	-38.850	86.149	28.498	1.00 59.35	FFFF
ATOM	8640	N2	NAG	F	650	-39.327	87.460	28.108	1.00 58.12	FFFF
ATOM	8641	C7	NAG	F	650	-38.476	88.416	27.742	1.00 58.77	FFFF
ATOM	8642	O7	NAG	F	650	-38.665	89.606	28.005	1.00 56.98	FFFF
ATOM	8643	C8	NAG	F	650	-37.246	88.005	26.933	1.00 58.71	FFFF
ATOM	8644	C3	NAG	F	650	-39.047	85.147	27.344	1.00 61.66	FFFF
ATOM	8645	O3	NAG	F	650	-38.268	85.535	26.217	1.00 62.32	FFFF
ATOM	8646	C4	NAG	F	650	-38.668	83.717	27.774	1.00 61.84	FFFF
ATOM	8647	O4	NAG	F	650	-39.062	82.776	26.745	1.00 63.47	FFFF
ATOM	8648	C5	NAG	F	650	-39.386	83.365	29.089	1.00 62.78	FFFF
ATOM	8649	O5	NAG	F	650	-39.135	84.375	30.100	1.00 62.07	FFFF
ATOM	8650	C6	NAG	F	650	-38.935	82.039	29.665	1.00 64.17	FFFF
ATOM	8651	O6	NAG	F	650	-37.523	82.001	29.827	1.00 66.42	FFFF
ATOM	8652	C1	NAG	F	651	-38.076	82.313	25.885	1.00 65.06	FFFF
ATOM	8653	C2	NAG	F	651	-38.397	80.889	25.423	1.00 65.02	FFFF
ATOM	8654	N2	NAG	F	651	-38.467	80.003	26.565	1.00 64.20	FFFF
ATOM	8655	C7	NAG	F	651	-39.622	79.438	26.889	1.00 63.41	FFFF
ATOM	8656	O7	NAG	F	651	-40.715	79.935	26.607	1.00 62.73	FFFF
ATOM	8657	C8	NAG	F	651	-39.551	78.121	27.642	1.00 63.39	FFFF
ATOM	8658	C3	NAG	F	651	-37.306	80.415	24.463	1.00 65.15	FFFF
ATOM	8659	O3	NAG	F	651	-37.624	79.130	23.962	1.00 64.27	FFFF
ATOM	8660	C4	NAG	F	651	-37.171	81.387	23.301	1.00 67.21	FFFF
ATOM	8661	O4	NAG	F	651	-36.067	81.000	22.492	1.00 69.05	FFFF
ATOM	8662	C5	NAG	F	651	-36.960	82.812	23.831	1.00 68.18	FFFF
ATOM	8663	O5	NAG	F	651	-38.026	83.175	24.743	1.00 67.14	FFFF
ATOM	8664	C6	NAG	F	651	-36.944	83.846	22.725	1.00 69.10	FFFF
ATOM	8665	O6	NAG	F	651	-35.719	83.805	22.007	1.00 71.95	FFFF
ATOM	8666	PT+2	PT2	G	702	-12.937	-33.586	36.278	0.50 58.16	GGGG
ATOM	8667	PT+2	PT2	G	706	-20.700	98.681	23.092	0.60 55.80	GGGG
ATOM	8668	PT+2	PT2	G	707	-14.020	65.178	36.237	0.50 57.59	GGGG
ATOM	8669	PT+2	PT2	G	711	9.619	32.209	36.875	0.60 74.81	GGGG
ATOM	8670	PT+2	PT2	G	814	-19.380	82.486	-2.990	0.50121.53	GGGG
ATOM	8671	PT+2	PT2	G	816	27.506	50.450	16.793	0.50143.70	GGGG
ATOM	8672	PT+2	PT2	G	719	-15.621	58.978	51.789	0.20105.99	GGGG
ATOM	8673	CD+2	CD2	G	721	-0.083	34.244	70.030	1.00 46.64	GGGG
ATOM	8674	CD+2	CD2	G	722	2.151	37.249	68.882	1.00 71.11	GGGG
ATOM	8675	CD+2	CD2	G	723	-47.338	84.987	18.385	1.00 94.96	GGGG
ATOM	8676	CD+2	CD2	G	724	-36.776	97.081	52.307	1.00 76.81	GGGG
ATOM	8677	CD+2	CD2	G	725	-38.037	100.626	58.689	1.00 94.24	GGGG
ATOM	8678	CD+2	CD2	G	726	-39.065	76.599	32.090	1.00100.85	GGGG
ATOM	8679	CD+2	CD2	G	727	-0.835	94.811	19.286	1.00 77.50	GGGG
ATOM	8680	CD+2	CD2	G	728	20.466	26.964	50.663	1.00103.98	GGGG
ATOM	8681	CD+2	CD2	G	729	-26.440	93.826	25.631	1.00102.89	GGGG
ATOM	8682	CD+2	CD2	G	730	0.891	36.397	73.624	1.00 54.05	GGGG
ATOM	8683	CD+2	CD2	G	731	-7.554	65.551	34.652	1.00122.70	GGGG
ATOM	8684	CL-1	CL1	G	736	1.594	32.778	70.827	1.00 47.55	GGGG
ATOM	8685	CL-1	CL1	G	737	17.346	55.996	54.666	1.00100.60	GGGG
ATOM	8686	CL-1	CL1	G	738	0.203	95.592	17.550	1.00 68.81	GGGG
ATOM	8687	CL-1	CL1	G	739	17.490	56.437	51.762	1.00 83.89	GGGG

END

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APPENDIX III

ATOM	1	C1	P1	900	17.247	34.337	33.040	0.00	50.00	PATB	0
ATOM	2	C2	P1	900	17.586	33.278	32.606	0.00	50.00	PATB	1
ATOM	3	C3	P1	900	14.612	33.590	32.345	0.00	46.36	PATB	2
ATOM	4	C4	P1	900	18.573	34.785	33.366	0.00	45.45	PATB	3
ATOM	5	C5	P1	900	32.438	29.934	19.147	0.00	45.45	PATB	4
ATOM	6	C6	P1	900	18.157	33.760	33.518	0.00	44.55	PATB	5
ATOM	7	C7	P1	900	17.122	32.075	31.575	0.00	44.55	PATB	6
ATOM	8	C8	P1	900	16.252	31.139	32.688	0.00	43.64	PATB	7
ATOM	9	C9	P1	900	16.249	34.011	32.951	0.00	41.82	PATB	8
ATOM	10	C10	P1	900	-10.094	34.241	58.839	0.00	40.91	PATB	9
ATOM	11	C11	P1	900	16.468	32.097	33.873	0.00	40.91	PATB	10
ATOM	12	C12	P1	900	15.489	32.195	32.392	0.00	40.91	PATB	11
ATOM	13	C13	P1	900	23.753	33.297	10.480	0.00	39.09	PATB	12
ATOM	14	C14	P1	900	33.309	30.398	18.052	0.00	39.09	PATB	13
ATOM	15	C15	P1	900	-2.998	21.831	64.821	0.00	37.27	PATB	14
ATOM	16	C16	P1	900	33.279	29.493	19.573	0.00	37.27	PATB	15
ATOM	17	C17	P1	900	14.731	31.540	33.645	0.00	36.36	PATB	16
ATOM	18	C18	P1	900	15.225	33.551	33.250	0.00	36.36	PATB	17
ATOM	19	C19	P1	900	-1.642	53.330	50.131	0.00	34.55	PATB	18
ATOM	20	C20	P1	900	13.430	32.330	33.472	0.00	34.55	PATB	19
ATOM	21	C21	P1	900	24.488	32.011	11.018	0.00	33.64	PATB	20
ATOM	22	C22	P1	900	-3.044	55.528	51.405	0.57	33.64	PATB	21
ATOM	23	C23	P1	900	22.926	33.277	9.745	0.00	32.73	PATB	22
ATOM	24	C24	P1	900	-2.583	52.917	50.555	0.00	32.73	PATB	23
ATOM	25	C25	P1	900	15.585	30.959	33.518	0.00	32.73	PATB	24
ATOM	26	C26	P1	900	9.955	54.402	54.165	0.00	32.73	PATB	25
ATOM	27	C27	P1	900	7.601	50.461	7.677	0.00	32.73	PATB	26
ATOM	28	C28	P1	900	6.373	33.507	46.876	0.00	31.82	PATB	27
ATOM	29	C29	P1	900	34.629	30.215	18.700	0.00	31.82	PATB	28
ATOM	30	C30	P1	900	1.456	32.977	69.898	0.00	31.82	PATB	29
ATOM	31	C31	P1	900	-1.332	50.347	15.988	0.00	30.91	PATB	30
ATOM	32	C32	P1	900	-10.702	33.287	58.969	0.00	30.91	PATB	31
ATOM	33	C33	P1	900	1.321	48.300	44.892	0.00	30.91	PATB	32
ATOM	34	C34	P1	900	18.824	26.334	17.574	0.00	30.91	PATB	33
ATOM	35	C35	P1	900	-2.057	21.217	62.848	0.00	30.91	PATB	34
ATOM	36	C36	P1	900	28.504	28.755	27.969	0.00	30.91	PATB	35
ATOM	37	C37	P1	900	-1.408	54.375	50.566	0.00	30.91	PATB	36
ATOM	38	C38	P1	900	0.435	49.041	17.446	0.00	30.91	PATB	37
ATOM	39	C39	P1	900	-3.133	55.380	50.016	0.50	30.91	PATB	38
ATOM	40	C40	P1	900	-0.728	21.929	61.350	0.00	30.91	PATB	39
ATOM	41	C41	P1	900	-2.775	54.272	50.848	0.50	30.00	PATB	40
ATOM	42	C42	P1	900	-7.106	59.427	30.313	0.00	30.00	PATB	41
ATOM	43	C43	P1	900	-1.784	53.383	48.515	0.00	30.00	PATB	42
ATOM	44	C44	P1	900	14.445	32.282	34.575	0.00	30.00	PATB	43
ATOM	45	C45	P1	900	-1.715	54.387	48.585	0.00	29.09	PATB	44
ATOM	46	C46	P1	900	-0.796	49.446	16.917	0.57	29.09	PATB	45
ATOM	47	C47	P1	900	-2.878	54.011	49.733	0.50	28.18	PATB	46
ATOM	48	C48	P1	900	4.700	33.242	29.042	0.00	28.18	PATB	47
ATOM	49	C49	P1	900	-1.507	21.465	61.968	0.00	28.18	PATB	48
ATOM	50	C50	P1	900	-2.632	53.930	48.357	0.00	28.18	PATB	49
ATOM	51	C51	P1	900	27.666	27.832	28.253	0.00	28.18	PATB	50
ATOM	52	C52	P1	900	-4.688	35.358	42.674	0.00	28.18	PATB	51
ATOM	53	C53	P1	900	16.884	53.968	53.834	0.00	27.27	PATB	52
ATOM	54	C54	P1	900	-2.145	50.305	17.181	0.00	27.27	PATB	53
ATOM	55	C55	P1	900	-7.663	60.175	30.765	0.00	27.27	PATB	54
ATOM	56	C56	P1	900	-2.299	55.380	49.381	0.50	27.27	PATB	55
ATOM	57	C57	P1	900	28.828	29.735	28.544	0.00	27.27	PATB	56
ATOM	58	C58	P1	900	-3.421	53.458	51.786	0.00	26.36	PATB	57
ATOM	59	C59	P1	900	-4.065	55.649	51.025	0.57	26.36	PATB	58
ATOM	60	C60	P1	900	-11.182	34.185	58.090	0.00	26.36	PATB	59
ATOM	61	C61	P1	900	14.412	56.379	17.377	0.00	26.36	PATB	60
ATOM	62	C62	P1	900	16.522	27.767	16.897	0.00	26.36	PATB	61
ATOM	63	C63	P1	900	-3.033	20.716	62.720	0.00	26.36	PATB	62
ATOM	64	C64	P1	900	-6.186	59.832	31.086	0.00	26.36	PATB	63
ATOM	65	C65	P1	900	34.275	29.502	17.720	0.00	26.36	PATB	64
ATOM	66	C66	P1	900	4.605	48.993	44.194	0.50	25.45	PATB	65
ATOM	67	C67	P1	900	13.342	31.893	60.930	0.00	25.45	PATB	66

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ATOM	68	C68	P1	900	-4.138	54.544	50.683	0.57	25.45	PATB	67
ATOM	69	C69	P1	900	-3.099	35.112	42.282	0.00	25.45	PATB	68
ATOM	70	C70	P1	900	-2.923	20.301	63.745	0.00	25.45	PATB	69
ATOM	71	C71	P1	900	-2.352	57.350	50.276	0.00	25.45	PATB	70
ATOM	72	C72	P1	900	-1.704	48.687	18.845	0.00	25.45	PATB	71
ATOM	73	C73	P1	900	-3.729	21.444	63.692	0.50	25.45	PATB	72
ATOM	74	C74	P1	900	18.025	26.136	18.607	0.00	25.45	PATB	73
ATOM	75	C75	P1	900	20.034	25.596	17.772	0.00	25.45	PATB	74
ATOM	76	C76	P1	900	4.929	32.281	29.839	0.00	24.55	PATB	75
ATOM	77	C77	P1	900	-3.973	54.714	52.063	0.50	24.55	PATB	76
ATOM	78	C78	P1	900	-4.494	55.479	49.703	0.00	24.55	PATB	77
ATOM	79	C79	P1	900	27.617	40.233	7.453	0.00	24.55	PATB	78
ATOM	80	C80	P1	900	7.252	31.840	48.687	0.00	23.64	PATB	79
ATOM	81	C81	P1	900	17.998	53.653	53.978	0.00	23.64	PATB	80
ATOM	82	C82	P1	900	8.829	48.216	9.226	0.00	23.64	PATB	81
ATOM	83	C83	P1	900	-3.433	54.847	48.757	0.00	23.64	PATB	82
ATOM	84	C84	P1	900	4.141	31.737	29.171	0.00	23.64	PATB	83
ATOM	85	C85	P1	900	7.717	33.701	47.514	0.00	23.64	PATB	84
ATOM	86	C86	P1	900	23.852	32.243	9.563	0.50	23.64	PATB	85
ATOM	87	C87	P1	900	16.105	27.364	18.186	0.00	23.64	PATB	86
ATOM	88	C88	P1	900	17.050	53.979	52.310	0.00	23.64	PATB	87
ATOM	89	C89	P1	900	8.186	32.440	49.215	0.00	22.73	PATB	88
ATOM	90	C90	P1	900	16.892	34.699	60.058	0.00	22.73	PATB	89
ATOM	91	C91	P1	900	2.293	50.463	45.378	0.00	22.73	PATB	90
ATOM	92	C92	P1	900	-2.944	54.775	53.010	0.00	22.73	PATB	91
ATOM	93	C93	P1	900	15.575	32.992	59.687	0.00	22.73	PATB	92
ATOM	94	C94	P1	900	-4.213	56.997	52.872	0.00	22.73	PATB	93
ATOM	95	C95	P1	900	23.205	54.707	27.214	0.00	22.73	PATB	94
ATOM	96	C96	P1	900	18.575	25.016	17.973	0.50	22.73	PATB	95
ATOM	97	C97	P1	900	27.243	27.969	29.443	0.00	22.73	PATB	96
ATOM	98	C98	P1	900	5.156	47.732	44.448	0.00	22.73	PATB	97
ATOM	99	C99	P1	900	13.810	31.950	59.888	0.00	21.82	PATB	98
ATOM	100	C1	P2	900	-6.509	48.140	25.924	0.00	21.82	PATB	99
ATOM	101	C2	P2	900	29.686	27.695	27.903	0.00	21.82	PATB	100
ATOM	102	C3	P2	900	23.607	50.347	53.121	0.00	21.82	PATB	101
ATOM	103	C4	P2	900	-3.642	56.678	49.898	0.00	21.82	PATB	102
ATOM	104	C5	P2	900	-3.287	19.784	65.001	0.00	21.82	PATB	103
ATOM	105	C6	P2	900	-4.895	60.363	43.735	0.00	21.82	PATB	104
ATOM	106	C7	P2	900	-3.655	53.730	53.006	0.00	21.82	PATB	105
ATOM	107	C8	P2	900	17.127	54.477	54.778	0.00	21.82	PATB	106
ATOM	108	C9	P2	900	3.274	48.637	44.447	0.00	21.82	PATB	107
ATOM	109	C10	P2	900	14.168	31.778	58.927	0.00	21.82	PATB	108
ATOM	110	C11	P2	900	0.963	48.500	20.822	0.00	21.82	PATB	109
ATOM	111	C12	P2	900	19.784	25.878	16.479	0.00	21.82	PATB	110
ATOM	112	C13	P2	900	-8.775	37.210	61.481	0.00	20.91	PATB	111
ATOM	113	C14	P2	900	-5.441	34.655	42.315	0.00	20.91	PATB	112
ATOM	114	C15	P2	900	1.342	45.346	23.267	0.00	20.91	PATB	113
ATOM	115	C16	P2	900	-6.609	61.088	30.635	0.50	20.91	PATB	114
ATOM	116	C17	P2	900	3.800	50.762	45.040	0.00	20.91	PATB	115
ATOM	117	C18	P2	900	1.822	48.632	44.076	0.00	20.91	PATB	116
ATOM	118	C19	P2	900	1.903	48.645	21.700	0.00	20.91	PATB	117
ATOM	119	C20	P2	900	-3.163	58.074	53.461	0.00	20.91	PATB	118
ATOM	120	C21	P2	900	10.166	55.351	53.298	0.00	20.91	PATB	119
ATOM	121	C22	P2	900	-2.079	48.948	17.521	0.50	20.91	PATB	120
ATOM	122	C23	P2	900	28.274	29.378	29.639	0.00	20.91	PATB	121
ATOM	123	C24	P2	900	-3.686	36.264	41.799	0.00	20.91	PATB	122
ATOM	124	C25	P2	900	-7.798	48.395	24.564	0.00	20.91	PATB	123
ATOM	125	C26	P2	900	19.227	47.896	63.105	0.00	20.91	PATB	124
ATOM	126	C27	P2	900	21.054	48.027	35.807	0.00	20.00	PATB	125
ATOM	127	C28	P2	900	-7.382	27.618	52.497	0.00	20.00	PATB	126
ATOM	128	C29	P2	900	3.441	33.713	28.662	0.00	20.00	PATB	127
ATOM	129	C30	P2	900	16.967	26.526	18.775	0.00	20.00	PATB	128
ATOM	130	C31	P2	900	16.574	54.702	53.042	0.00	20.00	PATB	129
ATOM	131	C32	P2	900	2.403	33.180	70.909	0.50	20.00	PATB	130
ATOM	132	C33	P2	900	-3.918	58.693	42.543	0.00	20.00	PATB	131
ATOM	133	C34	P2	900	-2.710	49.605	18.585	0.00	20.00	PATB	132
ATOM	134	C35	P2	900	-2.045	49.193	16.336	0.50	19.09	PATB	133
ATOM	135	C36	P2	900	2.133	31.320	28.492	0.00	19.09	PATB	134
ATOM	136	C37	P2	900	2.006	45.719	25.314	0.00	19.09	PATB	135
ATOM	137	C38	P2	900	-1.814	56.646	49.033	0.00	19.09	PATB	136
ATOM	138	C39	P2	900	3.685	48.460	26.732	0.00	19.09	PATB	137

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ATOM	139	C40	P2	900	19.303	24.292	18.925	0.00	19.09	PATB	138
ATOM	140	C41	P2	900	-5.731	26.335	53.685	0.00	19.09	PATB	139
ATOM	141	C42	P2	900	20.332	49.688	35.178	0.00	19.09	PATB	140
ATOM	142	C43	P2	900	5.940	48.879	44.600	0.00	19.09	PATB	141
ATOM	143	C44	P2	900	6.810	32.304	47.442	0.50	19.09	PATB	142
ATOM	144	C45	P2	900	0.572	48.417	18.600	0.00	19.09	PATB	143
ATOM	145	C46	P2	900	-5.647	61.204	43.844	0.00	19.09	PATB	144
ATOM	146	C47	P2	900	-2.319	22.665	60.897	0.57	19.09	PATB	145
ATOM	147	C48	P2	900	1.176	48.945	22.395	0.00	19.09	PATB	146
ATOM	148	C49	P2	900	28.661	28.106	29.200	0.50	19.09	PATB	147
ATOM	149	C50	P2	900	7.450	48.850	8.644	0.00	19.09	PATB	148
ATOM	150	C51	P2	900	23.898	32.840	8.298	0.00	19.09	PATB	149
ATOM	151	C52	P2	900	25.627	32.525	8.638	0.00	19.09	PATB	150
ATOM	152	C53	P2	900	-4.149	59.614	43.201	0.00	18.18	PATB	151
ATOM	153	C54	P2	900	-4.273	20.223	64.109	0.57	18.18	PATB	152
ATOM	154	C55	P2	900	5.426	46.495	27.453	0.00	18.18	PATB	153
ATOM	155	C56	P2	900	-2.339	34.266	41.514	0.00	18.18	PATB	154
ATOM	156	C57	P2	900	-3.606	55.906	53.505	0.50	18.18	PATB	155
ATOM	157	C58	P2	900	-3.229	57.100	54.130	0.00	18.18	PATB	156
ATOM	158	C59	P2	900	-4.653	53.449	51.784	0.00	18.18	PATB	157
ATOM	159	C60	P2	900	13.626	31.556	62.318	0.00	18.18	PATB	158
ATOM	160	C61	P2	900	-10.189	47.601	46.487	0.50	18.18	PATB	159
ATOM	161	C62	P2	900	27.621	39.645	5.890	0.00	18.18	PATB	160
ATOM	162	C63	P2	900	8.532	49.873	6.542	0.00	18.18	PATB	161
ATOM	163	C64	P2	900	7.612	49.119	7.280	0.50	18.18	PATB	162
ATOM	164	C65	P2	900	-12.434	33.931	58.743	0.00	18.18	PATB	163
ATOM	165	C66	P2	900	-4.730	55.708	52.695	0.57	18.18	PATB	164
ATOM	166	C67	P2	900	3.647	32.843	29.873	0.50	18.18	PATB	165
ATOM	167	C68	P2	900	-0.672	48.355	17.960	0.50	18.18	PATB	166
ATOM	168	C69	P2	900	-8.895	37.317	62.901	0.00	18.18	PATB	167
ATOM	169	C70	P2	900	16.850	26.495	17.380	0.50	18.18	PATB	168
ATOM	170	C71	P2	900	2.509	34.363	28.727	0.00	18.18	PATB	169
ATOM	171	C72	P2	900	25.566	31.148	9.717	0.00	18.18	PATB	170
ATOM	172	C73	P2	900	9.849	55.646	52.364	0.00	18.18	PATB	171
ATOM	173	C74	P2	900	-9.118	47.794	45.606	0.00	18.18	PATB	172
ATOM	174	C75	P2	900	1.178	48.915	23.794	0.50	18.18	PATB	173
ATOM	175	C76	P2	900	-11.301	48.637	43.154	0.00	17.27	PATB	174
ATOM	176	C77	P2	900	-1.922	35.564	40.847	0.00	17.27	PATB	175
ATOM	177	C78	P2	900	-5.260	60.238	30.294	0.00	17.27	PATB	176
ATOM	178	C79	P2	900	-6.542	46.741	25.881	0.50	17.27	PATB	177
ATOM	179	C80	P2	900	-2.859	21.813	61.868	0.50	17.27	PATB	178
ATOM	180	C81	P2	900	9.089	56.567	54.425	0.00	17.27	PATB	179
ATOM	181	C82	P2	900	-1.733	47.465	18.162	0.57	17.27	PATB	180
ATOM	182	C83	P2	900	0.986	44.337	26.479	0.00	17.27	PATB	181
ATOM	183	C84	P2	900	18.732	47.492	36.947	0.71	17.27	PATB	182
ATOM	184	C85	P2	900	18.721	54.189	53.464	0.00	17.27	PATB	183
ATOM	185	C86	P2	900	-3.271	48.308	18.505	0.00	17.27	PATB	184
ATOM	186	C87	P2	900	15.087	27.293	17.806	0.00	17.27	PATB	185
ATOM	187	C88	P2	900	2.107	31.931	70.350	0.00	17.27	PATB	186
ATOM	188	C89	P2	900	-7.665	47.432	25.572	0.50	17.27	PATB	187
ATOM	189	C90	P2	900	-4.206	35.026	41.402	0.50	17.27	PATB	188
ATOM	190	C91	P2	900	23.042	31.399	8.795	0.57	17.27	PATB	189
ATOM	191	C92	P2	900	-6.058	47.002	27.168	0.00	17.27	PATB	190
ATOM	192	C93	P2	900	17.777	34.906	59.220	0.00	17.27	PATB	191
ATOM	193	C94	P2	900	1.528	46.369	21.859	0.00	17.27	PATB	192
ATOM	194	C95	P2	900	0.903	46.569	23.787	0.64	17.27	PATB	193
ATOM	195	C96	P2	900	-11.761	48.965	40.994	0.00	17.27	PATB	194
ATOM	196	C97	P2	900	0.295	47.788	19.819	0.50	17.27	PATB	195
ATOM	197	C98	P2	900	8.777	32.830	47.792	0.50	16.36	PATB	196
ATOM	198	C99	P2	900	18.260	45.613	36.164	0.00	16.36	PATB	197
ATOM	199	C1	P3	900	3.349	52.213	45.361	0.00	16.36	PATB	198
ATOM	200	C2	P3	900	-11.953	35.046	58.269	0.00	16.36	PATB	199
ATOM	201	C3	P3	900	-4.134	21.499	62.353	0.57	16.36	PATB	200
ATOM	202	C4	P3	900	2.969	32.402	28.793	0.50	16.36	PATB	201
ATOM	203	C5	P3	900	-4.745	58.720	54.213	0.00	16.36	PATB	202
ATOM	204	C6	P3	900	13.037	59.816	10.157	0.00	16.36	PATB	203
ATOM	205	C7	P3	900	1.664	47.680	20.091	0.00	16.36	PATB	204
ATOM	206	C8	P3	900	12.496	60.839	10.405	0.00	16.36	PATB	205
ATOM	207	C9	P3	900	8.979	56.224	53.152	0.00	16.36	PATB	206
ATOM	208	C10	P3	900	-5.087	60.480	31.662	0.64	15.45	PATB	207
ATOM	209	C11	P3	900	28.159	26.661	28.264	0.00	15.45	PATB	208

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ATOM	210	C12	P3	900	0.245	48.434	24.721	0.00	15.45	PATB 209
ATOM	211	C13	P3	900	24.834	32.954	7.745	0.00	15.45	PATB 210
ATOM	212	C14	P3	900	28.805	23.769	23.978	0.00	15.45	PATB 211
ATOM	213	C15	P3	900	-9.248	48.284	25.325	0.00	15.45	PATB 212
ATOM	214	C16	P3	900	-9.321	62.909	32.363	0.00	15.45	PATB 213
ATOM	215	C17	P3	900	-8.874	47.474	46.951	0.00	15.45	PATB 214
ATOM	216	C18	P3	900	-4.610	57.327	54.174	0.50	15.45	PATB 215
ATOM	217	C19	P3	900	17.823	25.589	16.941	0.57	15.45	PATB 216
ATOM	218	C20	P3	900	-3.404	33.879	41.356	0.00	15.45	PATB 217
ATOM	219	C21	P3	900	6.219	31.460	46.494	0.00	15.45	PATB 218
ATOM	220	C22	P3	900	19.486	49.529	36.283	0.50	15.45	PATB 219
ATOM	221	C23	P3	900	14.875	31.746	58.105	0.00	15.45	PATB 220
ATOM	222	C24	P3	900	29.819	28.775	28.785	0.57	15.45	PATB 221
ATOM	223	C25	P3	900	19.192	48.773	37.424	0.57	15.45	PATB 222
ATOM	224	C26	P3	900	22.184	54.812	28.117	0.00	15.45	PATB 223
ATOM	225	C27	P3	900	-8.257	28.082	52.891	0.00	15.45	PATB 224
ATOM	226	C28	P3	900	28.948	37.500	8.250	0.00	15.45	PATB 225
ATOM	227	C29	P3	900	-1.786	21.405	60.598	0.50	15.45	PATB 226
ATOM	228	C30	P3	900	27.976	23.428	23.475	0.00	15.45	PATB 227
ATOM	229	C31	P3	900	19.255	50.135	35.042	0.00	15.45	PATB 228
ATOM	230	C32	P3	900	23.035	51.165	52.796	0.00	15.45	PATB 229
ATOM	231	C33	P3	900	20.067	47.884	36.790	0.64	15.45	PATB 230
ATOM	232	C34	P3	900	12.552	44.396	45.666	0.00	15.45	PATB 231
ATOM	233	C35	P3	900	3.940	47.166	26.358	0.00	15.45	PATB 232
ATOM	234	C36	P3	900	13.407	57.664	17.107	0.71	14.55	PATB 233
ATOM	235	C37	P3	900	1.511	47.594	22.537	0.50	14.55	PATB 234
ATOM	236	C38	P3	900	28.869	39.423	8.185	0.00	14.55	PATB 235
ATOM	237	C39	P3	900	-0.608	47.060	17.434	0.64	14.55	PATB 236
ATOM	238	C40	P3	900	25.593	49.101	48.357	0.00	14.55	PATB 237
ATOM	239	C41	P3	900	2.567	49.813	44.169	0.50	14.55	PATB 238
ATOM	240	C42	P3	900	17.615	46.827	36.427	0.64	14.55	PATB 239
ATOM	241	C43	P3	900	0.854	45.415	24.577	0.50	14.55	PATB 240
ATOM	242	C44	P3	900	16.917	33.305	59.935	0.50	14.55	PATB 241
ATOM	243	C45	P3	900	-5.180	46.605	26.171	0.00	14.55	PATB 242
ATOM	244	C46	P3	900	-5.895	45.619	25.482	0.50	14.55	PATB 243
ATOM	245	C47	P3	900	17.355	49.060	35.701	0.00	14.55	PATB 244
ATOM	246	C48	P3	900	13.644	43.538	46.343	0.00	14.55	PATB 245
ATOM	247	C49	P3	900	10.691	44.515	44.939	0.00	14.55	PATB 246
ATOM	248	C50	P3	900	19.094	49.151	62.864	0.00	14.55	PATB 247
ATOM	249	C51	P3	900	17.274	32.651	58.749	0.64	14.55	PATB 248
ATOM	250	C52	P3	900	20.815	24.600	18.353	0.00	14.55	PATB 249
ATOM	251	C53	P3	900	-11.814	48.980	42.190	0.00	14.55	PATB 250
ATOM	252	C54	P3	900	2.903	31.306	29.661	0.57	14.55	PATB 251
ATOM	253	C55	P3	900	23.320	54.740	28.666	0.00	14.55	PATB 252
ATOM	254	C56	P3	900	8.369	57.110	53.936	0.00	14.55	PATB 253
ATOM	255	C57	P3	900	-9.880	46.646	47.463	0.57	13.64	PATB 254
ATOM	256	C58	P3	900	-0.043	47.164	18.710	0.50	13.64	PATB 255
ATOM	257	C59	P3	900	15.180	31.663	59.887	0.50	13.64	PATB 256
ATOM	258	C60	P3	900	2.351	33.321	29.649	0.57	13.64	PATB 257
ATOM	259	C61	P3	900	-3.677	54.505	54.172	0.50	13.64	PATB 258
ATOM	260	C62	P3	900	-7.299	46.376	27.001	0.57	13.64	PATB 259
ATOM	261	C63	P3	900	28.814	39.905	6.575	0.50	13.64	PATB 260
ATOM	262	C64	P3	900	1.070	45.729	26.355	0.57	13.64	PATB 261
ATOM	263	C65	P3	900	17.023	25.303	18.094	0.57	13.64	PATB 262
ATOM	264	C66	P3	900	1.127	32.685	71.206	0.00	13.64	PATB 263
ATOM	265	C67	P3	900	8.978	43.401	44.514	0.00	13.64	PATB 264
ATOM	266	C68	P3	900	2.679	47.717	26.103	0.64	13.64	PATB 265
ATOM	267	C69	P3	900	-10.292	25.837	65.504	0.00	13.64	PATB 266
ATOM	268	C70	P3	900	8.531	31.519	48.219	0.57	13.64	PATB 267
ATOM	269	C71	P3	900	1.847	45.655	27.516	0.71	13.64	PATB 268
ATOM	270	C72	P3	900	18.585	46.343	37.314	0.71	13.64	PATB 269
ATOM	271	C73	P3	900	17.726	55.145	53.703	0.50	12.73	PATB 270
ATOM	272	C74	P3	900	16.586	46.422	35.570	0.00	12.73	PATB 271
ATOM	273	C75	P3	900	11.219	30.359	67.189	0.00	12.73	PATB 272
ATOM	274	C76	P3	900	-9.348	48.433	47.236	0.00	12.73	PATB 273
ATOM	275	C77	P3	900	-2.390	60.276	18.676	0.00	12.73	PATB 274
ATOM	276	C78	P3	900	9.559	44.686	44.933	0.00	12.73	PATB 275
ATOM	277	C79	P3	900	3.880	50.123	43.796	0.57	12.73	PATB 276
ATOM	278	C80	P3	900	2.715	51.393	44.420	0.50	12.73	PATB 277
ATOM	279	C81	P3	900	-6.868	62.449	30.836	0.00	12.73	PATB 278
ATOM	280	C82	P3	900	19.700	24.250	17.583	0.50	12.73	PATB 279

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ATOM	281	C83	P3	900	-3.200	48.487	16.693	0.00	12.73	PATB 280
ATOM	282	C84	P3	900	30.285	37.823	7.988	0.71	12.73	PATB 281
ATOM	283	C85	P3	900	14.045	57.353	18.314	0.50	12.73	PATB 282
ATOM	284	C86	P3	900	-2.967	47.373	17.508	0.50	12.73	PATB 283
ATOM	285	C87	P3	900	13.579	60.940	9.524	0.50	12.73	PATB 284
ATOM	286	C88	P3	900	-7.996	47.199	24.232	0.00	12.73	PATB 285
ATOM	287	C89	P3	900	24.351	30.969	9.045	0.50	12.73	PATB 286
ATOM	288	C90	P3	900	18.347	48.806	36.656	0.57	12.73	PATB 287
ATOM	289	C91	P3	900	15.130	57.578	17.459	0.71	12.73	PATB 288
ATOM	290	C92	P3	900	9.592	47.770	8.033	0.00	12.73	PATB 289
ATOM	291	C93	P3	900	4.442	32.844	31.025	0.64	12.73	PATB 290
ATOM	292	C94	P3	900	28.641	23.847	25.159	0.00	12.73	PATB 291
ATOM	293	C95	P3	900	16.573	26.677	16.020	0.57	11.82	PATB 292
ATOM	294	C96	P3	900	19.021	47.242	38.294	0.79	11.82	PATB 293
ATOM	295	C97	P3	900	16.046	31.985	58.835	0.57	11.82	PATB 294
ATOM	296	C98	P3	900	14.822	28.144	15.548	0.00	11.82	PATB 295
ATOM	297	C99	P3	900	0.538	45.161	27.518	0.64	11.82	PATB 296
ATOM	298	C1	P4	900	1.508	47.052	26.486	0.71	11.82	PATB 297
ATOM	299	C2	P4	900	23.698	56.526	27.127	0.00	11.82	PATB 298
ATOM	300	C3	P4	900	-0.035	43.651	25.392	0.00	11.82	PATB 299
ATOM	301	C4	P4	900	0.074	44.257	24.477	0.00	11.82	PATB 300
ATOM	302	C5	P4	900	1.481	46.301	19.938	0.50	11.82	PATB 301
ATOM	303	C6	P4	900	10.053	55.985	54.082	0.00	11.82	PATB 302
ATOM	304	C7	P4	900	-0.449	46.376	19.793	0.00	11.82	PATB 303
ATOM	305	C8	P4	900	-1.941	47.839	16.678	0.57	11.82	PATB 304
ATOM	306	C9	P4	900	-8.701	38.455	61.844	0.00	11.82	PATB 305
ATOM	307	C10	P4	900	-6.067	26.121	55.372	0.00	11.82	PATB 306
ATOM	308	C11	P4	900	-0.022	45.560	23.496	0.57	11.82	PATB 307
ATOM	309	C12	P4	900	0.089	45.021	25.650	0.50	11.82	PATB 308
ATOM	310	C13	P4	900	8.193	47.828	8.041	0.50	11.82	PATB 309
ATOM	311	C14	P4	900	-9.546	25.324	64.385	0.00	11.82	PATB 310
ATOM	312	C15	P4	900	9.714	56.283	51.598	0.00	11.82	PATB 311
ATOM	313	C16	P4	900	24.048	51.102	51.663	0.00	11.82	PATB 312
ATOM	314	C17	P4	900	-4.324	61.641	43.704	0.50	11.82	PATB 313
ATOM	315	C18	P4	900	16.536	31.974	59.727	0.57	10.91	PATB 314
ATOM	316	C19	P4	900	3.198	33.487	31.032	0.71	10.91	PATB 315
ATOM	317	C20	P4	900	16.823	32.797	61.236	0.00	10.91	PATB 316
ATOM	318	C21	P4	900	18.744	24.638	16.636	0.57	10.91	PATB 317
ATOM	319	C22	P4	900	26.789	22.745	24.133	0.00	10.91	PATB 318
ATOM	320	C23	P4	900	24.056	31.669	7.869	0.00	10.91	PATB 319
ATOM	321	C24	P4	900	7.888	52.736	26.231	0.00	10.91	PATB 320
ATOM	322	C25	P4	900	19.729	49.989	37.865	0.50	10.91	PATB 321
ATOM	323	C26	P4	900	17.363	24.315	17.959	0.57	10.91	PATB 322
ATOM	324	C27	P4	900	-2.717	55.415	54.631	0.00	10.91	PATB 323
ATOM	325	C28	P4	900	26.256	48.327	47.457	0.00	10.91	PATB 324
ATOM	326	C29	P4	900	1.551	44.459	28.181	0.00	10.91	PATB 325
ATOM	327	C30	P4	900	17.830	44.432	36.440	0.00	10.91	PATB 326
ATOM	328	C31	P4	900	-8.682	46.474	25.658	0.64	10.91	PATB 327
ATOM	329	C32	P4	900	-5.043	21.107	63.343	0.64	10.91	PATB 328
ATOM	330	C33	P4	900	-7.478	46.161	25.016	0.57	10.91	PATB 329
ATOM	331	C34	P4	900	-5.561	54.698	51.413	0.00	10.91	PATB 330
ATOM	332	C35	P4	900	0.393	46.158	21.003	0.00	10.91	PATB 331
ATOM	333	C36	P4	900	13.191	57.258	19.420	0.00	10.91	PATB 332
ATOM	334	C37	P4	900	-2.620	48.291	15.433	0.57	10.91	PATB 333
ATOM	335	C38	P4	900	18.292	45.252	38.142	0.79	10.91	PATB 334
ATOM	336	C39	P4	900	-4.804	55.237	53.781	0.57	10.91	PATB 335
ATOM	337	C40	P4	900	-10.576	62.690	33.314	0.00	10.91	PATB 336
ATOM	338	C41	P4	900	-8.366	28.784	51.462	0.00	10.91	PATB 337
ATOM	339	C42	P4	900	20.558	49.157	37.103	0.00	10.00	PATB 338
ATOM	340	C43	P4	900	16.879	44.027	36.336	0.00	10.00	PATB 339
ATOM	341	C44	P4	900	10.106	53.318	26.692	0.00	10.00	PATB 340
ATOM	342	C45	P4	900	7.421	32.596	46.701	0.50	10.00	PATB 341
ATOM	343	C46	P4	900	4.971	51.657	26.782	0.00	10.00	PATB 342
ATOM	344	C47	P4	900	18.275	50.060	36.039	0.50	10.00	PATB 343
ATOM	345	C48	P4	900	14.355	30.518	61.340	0.00	10.00	PATB 344
ATOM	346	C49	P4	900	8.787	52.992	26.619	0.00	10.00	PATB 345
ATOM	347	C50	P4	900	18.159	23.421	18.685	0.00	10.00	PATB 346
ATOM	348	C51	P4	900	8.563	57.929	55.919	0.00	10.00	PATB 347
ATOM	349	C52	P4	900	-5.030	46.304	27.298	0.00	10.00	PATB 348
ATOM	350	C53	P4	900	2.804	29.946	29.979	0.79	10.00	PATB 349
ATOM	351	C54	P4	900	9.627	29.422	67.940	0.00	10.00	PATB 350

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ATOM	352	C55	P4	900	-0.854	44.613	24.105	0.00	10.00	PATB 351
ATOM	353	C56	P4	900	2.649	32.254	30.659	0.64	10.00	PATB 352
ATOM	354	C57	P4	900	19.818	50.875	36.089	0.57	10.00	PATB 353
ATOM	355	C58	P4	900	13.833	60.761	10.815	0.50	10.00	PATB 354
ATOM	356	C59	P4	900	-6.930	26.377	52.962	0.57	10.00	PATB 355
ATOM	357	C60	P4	900	-9.640	47.365	25.161	0.00	10.00	PATB 356
ATOM	358	C61	P4	900	-6.121	45.696	26.667	0.50	10.00	PATB 357
ATOM	359	C62	P4	900	1.175	48.188	25.738	0.79	10.00	PATB 358
ATOM	360	C63	P4	900	22.936	55.992	28.173	0.50	10.00	PATB 359
ATOM	361	C64	P4	900	4.440	47.472	27.630	0.50	9.09	PATB 360
ATOM	362	C65	P4	900	-3.647	52.299	57.862	0.00	9.09	PATB 361
ATOM	363	C66	P4	900	-8.484	27.385	54.212	0.00	9.09	PATB 362
ATOM	364	C67	P4	900	8.382	46.278	9.084	0.00	9.09	PATB 363
ATOM	365	C68	P4	900	29.259	38.443	7.264	0.50	9.09	PATB 364
ATOM	366	C69	P4	900	9.291	34.016	47.121	0.00	9.09	PATB 365
ATOM	367	C70	P4	900	16.351	32.236	56.967	0.00	9.09	PATB 366
ATOM	368	C71	P4	900	-3.781	60.963	43.135	0.50	9.09	PATB 367
ATOM	369	C72	P4	900	28.470	38.626	6.122	0.00	9.09	PATB 368
ATOM	370	C73	P4	900	14.322	29.820	60.362	0.00	9.09	PATB 369
ATOM	371	C74	P4	900	7.160	30.683	48.268	0.00	9.09	PATB 370
ATOM	372	C75	P4	900	-3.023	45.782	25.014	0.00	9.09	PATB 371
ATOM	373	C76	P4	900	6.851	48.018	7.691	0.57	9.09	PATB 372
ATOM	374	C77	P4	900	28.579	40.877	7.555	0.00	9.09	PATB 373
ATOM	375	C78	P4	900	7.672	48.983	5.888	0.57	9.09	PATB 374
ATOM	376	C79	P4	900	18.863	34.849	59.034	0.00	9.09	PATB 375
ATOM	377	C80	P4	900	7.291	53.383	25.754	0.00	9.09	PATB 376
ATOM	378	C81	P4	900	4.013	28.575	30.533	0.00	9.09	PATB 377
ATOM	379	C82	P4	900	16.464	25.276	16.811	0.64	9.09	PATB 378
ATOM	380	C83	P4	900	16.307	45.304	36.365	0.50	9.09	PATB 379
ATOM	381	C84	P4	900	19.533	48.941	38.772	0.00	9.09	PATB 380
ATOM	382	C85	P4	900	17.760	32.263	60.342	0.64	9.09	PATB 381
ATOM	383	C86	P4	900	1.656	30.670	29.637	0.71	9.09	PATB 382
ATOM	384	C87	P4	900	1.582	32.583	28.742	0.64	9.09	PATB 383
ATOM	385	C88	P4	900	3.904	31.643	30.548	0.57	9.09	PATB 384
ATOM	386	C89	P4	900	0.935	46.621	25.284	0.64	9.09	PATB 385
ATOM	387	C90	P4	900	-5.000	54.116	52.965	0.50	9.09	PATB 386
ATOM	388	C91	P4	900	1.404	47.698	24.447	0.71	9.09	PATB 387
ATOM	389	C92	P4	900	-10.319	64.015	32.372	0.00	8.18	PATB 388
ATOM	390	C93	P4	900	5.451	48.106	28.362	0.00	8.18	PATB 389
ATOM	391	C94	P4	900	0.575	34.590	28.232	0.00	8.18	PATB 390
ATOM	392	C95	P4	900	5.558	48.457	43.321	0.57	8.18	PATB 391
ATOM	393	C96	P4	900	2.946	28.015	29.634	0.00	8.18	PATB 392
ATOM	394	C97	P4	900	-3.455	60.708	19.776	0.00	8.18	PATB 393
ATOM	395	C98	P4	900	14.280	45.428	45.111	0.00	8.18	PATB 394
ATOM	396	C99	P4	900	-5.296	61.549	30.782	0.57	8.18	PATB 395
ATOM	397	C1	P5	900	28.350	40.723	5.374	0.50	8.18	PATB 396
ATOM	398	C2	P5	900	3.057	47.413	27.416	0.57	8.18	PATB 397
ATOM	399	C3	P5	900	0.746	46.545	27.546	0.79	8.18	PATB 398
ATOM	400	C4	P5	900	27.552	41.855	5.166	0.00	8.18	PATB 399
ATOM	401	C5	P5	900	-8.294	26.688	53.013	0.50	8.18	PATB 400
ATOM	402	C6	P5	900	24.551	50.878	49.945	0.00	8.18	PATB 401
ATOM	403	C7	P5	900	17.343	45.704	37.218	0.57	8.18	PATB 402
ATOM	404	C8	P5	900	-1.918	46.520	17.146	0.64	8.18	PATB 403
ATOM	405	C9	P5	900	29.330	26.893	28.994	0.57	8.18	PATB 404
ATOM	406	C10	P5	900	-0.606	45.833	24.746	0.57	8.18	PATB 405
ATOM	407	C11	P5	900	18.404	23.773	17.352	0.57	8.18	PATB 406
ATOM	408	C12	P5	900	5.125	49.850	43.217	0.64	8.18	PATB 407
ATOM	409	C13	P5	900	19.994	35.257	59.568	0.00	8.18	PATB 408
ATOM	410	C14	P5	900	-7.801	26.163	54.214	0.64	8.18	PATB 409
ATOM	411	C15	P5	900	-12.635	48.443	42.641	0.00	8.18	PATB 410
ATOM	412	C16	P5	900	18.344	49.986	37.660	0.64	8.18	PATB 411
ATOM	413	C17	P5	900	19.171	50.771	36.846	0.57	8.18	PATB 412
ATOM	414	C18	P5	900	5.324	32.957	32.756	0.00	8.18	PATB 413
ATOM	415	C19	P5	900	9.311	45.555	44.396	0.00	8.18	PATB 414
ATOM	416	C20	P5	900	15.336	27.188	16.432	0.50	8.18	PATB 415
ATOM	417	C21	P5	900	1.730	32.067	29.606	0.64	8.18	PATB 416
ATOM	418	C22	P5	900	8.714	48.492	6.685	0.64	8.18	PATB 417
ATOM	419	C23	P5	900	24.152	51.567	53.537	0.50	8.18	PATB 418
ATOM	420	C24	P5	900	9.607	32.682	48.909	0.00	8.18	PATB 419
ATOM	421	C25	P5	900	9.218	57.937	54.682	0.50	7.27	PATB 420
ATOM	422	C26	P5	900	-3.276	52.798	56.959	0.00	7.27	PATB 421

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ATOM	423	C27	P5	900	-12.051	47.560	41.228	0.00	7.27	PATB	422
ATOM	424	C28	P5	900	-7.244	45.530	25.847	0.57	7.27	PATB	423
ATOM	425	C29	P5	900	9.148	54.338	26.748	0.57	7.27	PATB	424
ATOM	426	C30	P5	900	18.157	33.564	59.339	0.71	7.27	PATB	425
ATOM	427	C31	P5	900	-3.272	35.195	40.895	0.50	7.27	PATB	426
ATOM	428	C32	P5	900	26.336	49.720	47.344	0.50	7.27	PATB	427
ATOM	429	C33	P5	900	1.920	28.961	29.524	0.93	7.27	PATB	428
ATOM	430	C34	P5	900	-0.522	44.564	26.824	0.71	7.27	PATB	429
ATOM	431	C35	P5	900	-0.951	44.704	25.499	0.50	7.27	PATB	430
ATOM	432	C36	P5	900	15.084	45.808	35.906	0.00	7.27	PATB	431
ATOM	433	C37	P5	900	0.772	31.442	28.798	0.71	7.27	PATB	432
ATOM	434	C38	P5	900	-8.917	24.549	64.634	0.00	7.27	PATB	433
ATOM	435	C39	P5	900	25.129	51.215	52.598	0.00	7.27	PATB	434
ATOM	436	C40	P5	900	-4.149	45.716	25.843	0.50	7.27	PATB	435
ATOM	437	C41	P5	900	9.651	57.413	53.461	0.50	7.27	PATB	436
ATOM	438	C42	P5	900	16.085	31.641	60.955	0.57	7.27	PATB	437
ATOM	439	C43	P5	900	14.915	30.910	63.010	0.00	7.27	PATB	438
ATOM	440	C44	P5	900	18.027	48.111	37.829	0.71	7.27	PATB	439
ATOM	441	C45	P5	900	-9.353	37.820	63.773	0.00	7.27	PATB	440
ATOM	442	C46	P5	900	10.611	54.259	26.352	0.00	6.36	PATB	441
ATOM	443	C47	P5	900	6.850	31.859	45.656	0.00	6.36	PATB	442
ATOM	444	C48	P5	900	5.093	52.902	25.995	0.00	6.36	PATB	443
ATOM	445	C49	P5	900	12.708	57.768	18.315	0.00	6.36	PATB	444
ATOM	446	C50	P5	900	1.881	31.086	30.592	0.71	6.36	PATB	445
ATOM	447	C51	P5	900	20.318	51.133	38.416	0.00	6.36	PATB	446
ATOM	448	C52	P5	900	29.446	28.793	30.134	0.64	6.36	PATB	447
ATOM	449	C53	P5	900	12.653	44.272	44.275	0.71	6.36	PATB	448
ATOM	450	C54	P5	900	10.311	55.830	25.141	0.00	6.36	PATB	449
ATOM	451	C55	P5	900	28.676	27.695	30.538	0.71	6.36	PATB	450
ATOM	452	C56	P5	900	14.603	43.035	46.282	0.00	6.36	PATB	451
ATOM	453	C57	P5	900	-5.493	34.757	40.920	0.64	6.36	PATB	452
ATOM	454	C58	P5	900	27.383	41.240	4.082	0.00	6.36	PATB	453
ATOM	455	C59	P5	900	15.875	31.848	62.323	0.00	6.36	PATB	454
ATOM	456	C60	P5	900	-11.430	26.001	64.868	0.00	6.36	PATB	455
ATOM	457	C61	P5	900	-2.472	46.278	18.226	0.64	6.36	PATB	456
ATOM	458	C62	P5	900	13.073	59.877	11.591	0.00	6.36	PATB	457
ATOM	459	C63	P5	900	7.817	47.846	6.692	0.64	6.36	PATB	458
ATOM	460	C64	P5	900	6.422	49.401	5.416	0.00	6.36	PATB	459
ATOM	461	C65	P5	900	-1.659	47.273	15.429	0.64	6.36	PATB	460
ATOM	462	C66	P5	900	-6.707	25.352	53.890	0.71	6.36	PATB	461
ATOM	463	C67	P5	900	7.492	31.165	46.996	0.57	6.36	PATB	462
ATOM	464	C68	P5	900	25.272	30.437	8.135	0.00	6.36	PATB	463
ATOM	465	C69	P5	900	20.216	48.861	63.648	0.50	6.36	PATB	464
ATOM	466	C70	P5	900	2.805	50.766	43.172	0.64	6.36	PATB	465
ATOM	467	C71	P5	900	28.089	22.667	24.645	0.50	6.36	PATB	466
ATOM	468	C72	P5	900	17.877	43.374	37.034	0.00	6.36	PATB	467
ATOM	469	C73	P5	900	15.438	30.725	58.880	0.64	6.36	PATB	468
ATOM	470	C74	P5	900	5.416	52.854	27.356	0.64	5.45	PATB	469
ATOM	471	C75	P5	900	-6.341	44.959	24.330	0.00	5.45	PATB	470
ATOM	472	C76	P5	900	2.803	30.905	30.999	0.71	5.45	PATB	471
ATOM	473	C77	P5	900	25.894	50.345	48.924	0.50	5.45	PATB	472
ATOM	474	C78	P5	900	-8.239	28.416	50.364	0.00	5.45	PATB	473
ATOM	475	C79	P5	900	-3.386	54.061	56.263	0.00	5.45	PATB	474
ATOM	476	C80	P5	900	-0.875	46.421	16.217	0.71	5.45	PATB	475
ATOM	477	C81	P5	900	-5.968	54.897	52.324	0.00	5.45	PATB	476
ATOM	478	C82	P5	900	16.964	50.249	35.585	0.00	5.45	PATB	477
ATOM	479	C83	P5	900	-3.519	45.106	26.934	0.71	5.45	PATB	478
ATOM	480	C84	P5	900	-10.006	25.309	63.210	0.00	5.45	PATB	479
ATOM	481	C85	P5	900	-0.005	32.489	27.589	0.00	5.45	PATB	480
ATOM	482	C86	P5	900	7.814	53.952	26.921	0.50	5.45	PATB	481
ATOM	483	C87	P5	900	-2.137	45.276	25.973	0.64	5.45	PATB	482
ATOM	484	C88	P5	900	8.594	33.333	46.499	0.00	5.45	PATB	483
ATOM	485	C89	P5	900	0.877	46.109	18.690	0.00	5.45	PATB	484
ATOM	486	C90	P5	900	-4.388	34.085	40.382	0.57	5.45	PATB	485
ATOM	487	C91	P5	900	-2.685	34.587	40.196	0.50	5.45	PATB	486
ATOM	488	C92	P5	900	26.683	49.232	48.610	0.00	5.45	PATB	487
ATOM	489	C93	P5	900	-4.908	45.008	26.782	0.57	5.45	PATB	488
ATOM	490	C94	P5	900	-4.824	44.926	24.904	0.00	5.45	PATB	489
ATOM	491	C95	P5	900	-4.245	32.918	41.142	0.00	4.55	PATB	490
ATOM	492	C96	P5	900	17.147	44.391	37.661	0.50	4.55	PATB	491
ATOM	493	C97	P5	900	1.438	32.957	30.647	0.71	4.55	PATB	492

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ATOM	494	C98	P5	900	19.831	24.276	16.189	0.57	4.55	PATB 493
ATOM	495	C99	P5	900	1.790	47.012	27.857	0.79	4.55	PATB 494
ATOM	496	C1	P6	900	17.781	24.982	15.680	0.64	4.55	PATB 495
ATOM	497	C2	P6	900	15.547	26.867	15.086	0.79	4.55	PATB 496
ATOM	498	C3	P6	900	-6.146	45.917	28.049	0.57	4.55	PATB 497
ATOM	499	C4	P6	900	17.235	31.252	58.752	0.71	4.55	PATB 498
ATOM	500	C5	P6	900	-4.258	36.119	40.529	0.57	4.55	PATB 499
ATOM	501	C6	P6	900	17.684	46.399	38.384	0.79	4.55	PATB 500
ATOM	502	C7	P6	900	1.090	33.788	29.258	0.71	4.55	PATB 501
ATOM	503	C8	P6	900	4.061	33.330	32.281	0.79	4.55	PATB 502
ATOM	504	C9	P6	900	-4.891	51.837	57.415	0.50	4.55	PATB 503
ATOM	505	C10	P6	900	-9.949	38.023	62.309	0.50	4.55	PATB 504
ATOM	506	C11	P6	900	28.961	22.438	23.574	0.57	4.55	PATB 505
ATOM	507	C12	P6	900	20.396	47.479	63.508	0.00	4.55	PATB 506
ATOM	508	C13	P6	900	-10.795	64.666	33.517	0.57	4.55	PATB 507
ATOM	509	C14	P6	900	5.877	55.552	26.272	0.00	4.55	PATB 508
ATOM	510	C15	P6	900	2.599	32.014	71.658	0.57	4.55	PATB 509
ATOM	511	C16	P6	900	11.434	30.787	68.307	0.00	4.55	PATB 510
ATOM	512	C17	P6	900	-5.751	62.478	29.838	0.00	4.55	PATB 511
ATOM	513	C18	P6	900	5.508	47.523	8.392	0.00	4.55	PATB 512
ATOM	514	C19	P6	900	4.340	48.830	27.912	0.50	4.55	PATB 513
ATOM	515	C20	P6	900	-9.684	28.127	52.928	0.00	4.55	PATB 514
ATOM	516	C21	P6	900	-2.470	33.368	40.448	0.50	4.55	PATB 515
ATOM	517	C22	P6	900	-3.801	46.684	18.397	0.00	4.55	PATB 516
ATOM	518	C23	P6	900	3.483	32.158	31.780	0.71	3.64	PATB 517
ATOM	519	C24	P6	900	15.326	58.725	18.590	0.00	3.64	PATB 518
ATOM	520	C25	P6	900	-5.667	53.164	51.523	0.00	3.64	PATB 519
ATOM	521	C26	P6	900	29.828	39.046	6.135	0.57	3.64	PATB 520
ATOM	522	C27	P6	900	16.918	30.744	60.276	0.64	3.64	PATB 521
ATOM	523	C28	P6	900	20.019	34.492	58.607	0.00	3.64	PATB 522
ATOM	524	C29	P6	900	27.932	42.525	3.997	0.50	3.64	PATB 523
ATOM	525	C30	P6	900	7.700	54.722	25.757	0.64	3.64	PATB 524
ATOM	526	C31	P6	900	-9.998	63.527	33.679	0.00	3.64	PATB 525
ATOM	527	C32	P6	900	30.918	28.781	29.652	0.71	3.64	PATB 526
ATOM	528	C33	P6	900	13.862	44.869	43.897	0.64	3.64	PATB 527
ATOM	529	C34	P6	900	-3.970	48.010	15.675	0.00	3.64	PATB 528
ATOM	530	C35	P6	900	-10.921	25.607	62.886	0.00	3.64	PATB 529
ATOM	531	C36	P6	900	14.227	58.612	17.730	0.64	3.64	PATB 530
ATOM	532	C37	P6	900	-11.346	24.967	65.808	0.57	3.64	PATB 531
ATOM	533	C38	P6	900	9.270	44.411	43.591	0.50	3.64	PATB 532
ATOM	534	C39	P6	900	19.416	45.721	38.832	0.00	3.64	PATB 533
ATOM	535	C40	P6	900	30.310	37.812	6.588	0.64	3.64	PATB 534
ATOM	536	C41	P6	900	9.911	55.469	26.433	0.64	3.64	PATB 535
ATOM	537	C42	P6	900	3.999	51.516	43.877	0.64	3.64	PATB 536
ATOM	538	C43	P6	900	25.269	50.830	47.770	0.00	3.64	PATB 537
ATOM	539	C44	P6	900	15.877	46.575	36.767	0.57	3.64	PATB 538
ATOM	540	C45	P6	900	-8.129	27.410	51.332	0.50	3.64	PATB 539
ATOM	541	C46	P6	900	17.154	23.167	18.732	0.00	3.64	PATB 540
ATOM	542	C47	P6	900	1.603	29.715	30.660	0.86	3.64	PATB 541
ATOM	543	C48	P6	900	-1.451	43.428	25.783	0.00	3.64	PATB 542
ATOM	544	C49	P6	900	-9.538	27.543	53.879	0.00	3.64	PATB 543
ATOM	545	C50	P6	900	28.895	39.684	5.309	0.50	3.64	PATB 544
ATOM	546	C51	P6	900	13.671	58.508	19.011	0.57	3.64	PATB 545
ATOM	547	C52	P6	900	7.366	57.885	53.982	0.00	3.64	PATB 546
ATOM	548	C53	P6	900	19.958	47.779	64.498	0.00	3.64	PATB 547
ATOM	549	C54	P6	900	1.201	45.747	28.603	0.71	3.64	PATB 548
ATOM	550	C55	P6	900	-2.879	47.252	16.116	0.57	2.73	PATB 549
ATOM	551	C56	P6	900	-8.487	63.710	32.963	0.00	2.73	PATB 550
ATOM	552	C57	P6	900	10.995	29.459	68.238	0.50	2.73	PATB 551
ATOM	553	C58	P6	900	0.600	31.480	30.187	0.79	2.73	PATB 552
ATOM	554	C59	P6	900	19.136	25.222	15.425	0.50	2.73	PATB 553
ATOM	555	C60	P6	900	-1.676	45.586	24.688	0.57	2.73	PATB 554
ATOM	556	C61	P6	900	18.962	51.498	35.173	0.50	2.73	PATB 555
ATOM	557	C62	P6	900	-1.183	61.695	19.644	0.00	2.73	PATB 556
ATOM	558	C63	P6	900	5.200	54.088	26.731	0.71	2.73	PATB 557
ATOM	559	C64	P6	900	30.541	27.597	29.008	0.64	2.73	PATB 558
ATOM	560	C65	P6	900	-10.139	24.459	65.312	0.50	2.73	PATB 559
ATOM	561	C66	P6	900	17.385	24.313	16.559	0.64	2.73	PATB 560
ATOM	562	C67	P6	900	8.338	30.257	47.644	0.64	2.73	PATB 561
ATOM	563	C68	P6	900	-4.943	45.210	28.167	0.64	2.73	PATB 562
ATOM	564	C69	P6	900	0.369	33.280	28.682	0.71	2.73	PATB 563

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ATOM	565	C70	P6	900	2.648	28.794	30.759	0.86	2.73	PATB 564
ATOM	566	C71	P6	900	13.791	44.117	45.076	0.50	2.73	PATB 565
ATOM	567	C72	P6	900	16.865	47.177	37.556	0.71	2.73	PATB 566
ATOM	568	C73	P6	900	20.043	52.030	34.459	0.00	2.73	PATB 567
ATOM	569	C74	P6	900	-9.433	64.715	33.199	0.50	2.73	PATB 568
ATOM	570	C75	P6	900	-2.999	59.803	43.058	0.00	2.73	PATB 569
ATOM	571	C76	P6	900	6.504	48.396	6.388	0.64	2.73	PATB 570
ATOM	572	C77	P6	900	27.777	22.043	23.432	0.57	2.73	PATB 571
ATOM	573	C78	P6	900	-7.738	26.165	51.839	0.79	2.73	PATB 572
ATOM	574	C79	P6	900	-4.058	44.321	25.908	0.64	2.73	PATB 573
ATOM	575	C80	P6	900	17.842	50.980	37.233	0.64	2.73	PATB 574
ATOM	576	C81	P6	900	17.029	48.398	36.891	0.64	1.82	PATB 575
ATOM	577	C82	P6	900	0.891	27.441	28.946	0.00	1.82	PATB 576
ATOM	578	C83	P6	900	-2.213	61.665	18.697	0.50	1.82	PATB 577
ATOM	579	C84	P6	900	4.227	49.096	42.453	0.00	1.82	PATB 578
ATOM	580	C85	P6	900	29.880	27.861	29.844	0.64	1.82	PATB 579
ATOM	581	C86	P6	900	8.557	57.433	52.587	0.57	1.82	PATB 580
ATOM	582	C87	P6	900	-9.553	39.235	62.887	0.00	1.82	PATB 581
ATOM	583	C88	P6	900	5.906	48.911	28.973	0.00	1.82	PATB 582
ATOM	584	C89	P6	900	19.492	33.789	59.697	0.79	1.82	PATB 583
ATOM	585	C90	P6	900	15.445	25.848	16.041	0.71	1.82	PATB 584
ATOM	586	C91	P6	900	6.758	53.036	27.001	0.57	1.82	PATB 585
ATOM	587	C92	P6	900	19.939	52.247	35.839	0.64	1.82	PATB 586
ATOM	588	C93	P6	900	-9.015	27.596	51.820	0.50	1.82	PATB 587
ATOM	589	C94	P6	900	4.940	50.092	27.823	0.00	1.82	PATB 588
ATOM	590	C95	P6	900	21.007	23.543	16.391	0.71	1.82	PATB 589
ATOM	591	C96	P6	900	4.195	47.893	28.943	0.57	1.82	PATB 590
ATOM	592	C97	P6	900	-1.373	34.130	40.029	0.00	1.82	PATB 591
ATOM	593	C98	P6	900	-1.879	44.221	26.855	0.79	1.82	PATB 592
ATOM	594	C99	P6	900	8.517	55.566	26.518	0.71	1.82	PATB 593
ATOM	595	C1	P7	900	18.937	51.097	38.188	0.64	1.82	PATB 594
ATOM	596	C2	P7	900	1.403	32.061	72.384	0.00	1.82	PATB 595
ATOM	597	C3	P7	900	24.891	51.557	48.355	0.00	1.82	PATB 596
ATOM	598	C4	P7	900	16.476	25.417	15.418	0.71	1.82	PATB 597
ATOM	599	C5	P7	900	8.066	58.711	54.869	0.57	1.82	PATB 598
ATOM	600	C6	P7	900	14.363	44.789	36.685	0.00	1.82	PATB 599
ATOM	601	C7	P7	900	-7.220	25.348	55.192	0.79	1.82	PATB 600
ATOM	602	C8	P7	900	-4.120	47.128	16.752	0.64	1.82	PATB 601
ATOM	603	C9	P7	900	3.197	52.652	44.040	0.71	1.82	PATB 602
ATOM	604	C10	P7	900	-8.379	45.550	26.666	0.71	1.82	PATB 603
ATOM	605	C11	P7	900	27.226	48.908	46.631	0.57	1.82	PATB 604
ATOM	606	C12	P7	900	4.220	32.122	32.969	0.86	1.82	PATB 605
ATOM	607	C13	P7	900	18.273	52.114	34.121	0.00	0.91	PATB 606
ATOM	608	C14	P7	900	15.371	29.473	59.503	0.71	0.91	PATB 607
ATOM	609	C15	P7	900	-6.787	25.206	52.208	0.86	0.91	PATB 608
ATOM	610	C16	P7	900	9.569	30.580	48.227	0.71	0.91	PATB 609
ATOM	611	C17	P7	900	16.198	31.096	57.765	0.71	0.91	PATB 610
ATOM	612	C18	P7	900	25.674	51.595	49.514	0.57	0.91	PATB 611
ATOM	613	C19	P7	900	15.801	44.759	37.551	0.86	0.91	PATB 612
ATOM	614	C20	P7	900	1.658	27.706	30.087	1.00	0.91	PATB 613
ATOM	615	C21	P7	900	19.756	51.916	37.400	0.71	0.91	PATB 614
ATOM	616	C22	P7	900	20.200	26.001	14.955	0.00	0.91	PATB 615
ATOM	617	C23	P7	900	0.901	44.457	29.056	0.00	0.91	PATB 616
ATOM	618	C24	P7	900	-4.925	35.194	39.717	0.71	0.91	PATB 617
ATOM	619	C25	P7	900	9.809	31.884	47.777	0.64	0.91	PATB 618
ATOM	620	C26	P7	900	-0.133	45.343	28.733	0.79	0.91	PATB 619
ATOM	621	C27	P7	900	-3.967	53.934	57.794	0.00	0.91	PATB 620
ATOM	622	C28	P7	900	27.831	48.869	47.893	0.00	0.91	PATB 621
ATOM	623	C29	P7	900	-7.091	45.069	27.459	0.64	0.91	PATB 622
ATOM	624	C30	P7	900	-5.657	36.086	40.510	0.79	0.91	PATB 623
ATOM	625	C31	P7	900	-4.072	52.643	59.014	0.00	0.91	PATB 624
ATOM	626	C32	P7	900	-6.002	44.397	26.158	0.64	0.91	PATB 625
ATOM	627	C33	P7	900	6.090	54.019	27.742	0.71	0.91	PATB 626
ATOM	628	C34	P7	900	17.194	49.788	36.886	0.57	0.91	PATB 627
ATOM	629	C35	P7	900	-0.925	61.934	18.218	0.00	0.91	PATB 628
ATOM	630	C36	P7	900	10.771	30.742	69.074	0.00	0.91	PATB 629
ATOM	631	C37	P7	900	19.785	23.051	16.865	0.64	0.91	PATB 630
ATOM	632	C38	P7	900	29.209	41.231	6.356	0.57	0.91	PATB 631
ATOM	633	C39	P7	900	7.452	46.767	7.506	0.71	0.91	PATB 632
ATOM	634	C40	P7	900	-9.180	26.194	53.977	0.57	0.00	PATB 633
ATOM	635	C41	P7	900	13.758	42.723	45.210	0.57	0.00	PATB 634

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ATOM	636	C42	P7	900	20.890	23.124	17.721	0.00	0.00	PATB 635
ATOM	637	C43	P7	900	28.415	40.172	4.088	0.00	0.00	PATB 636
ATOM	638	C44	P7	900	20.474	24.930	15.131	0.00	0.00	PATB 637
ATOM	639	C45	P7	900	16.226	46.014	38.002	0.79	0.00	PATB 638
ATOM	640	C46	P7	900	-10.868	24.889	64.230	0.50	0.00	PATB 639
ATOM	641	C47	P7	900	15.036	44.414	44.510	0.57	0.00	PATB 640
ATOM	642	C48	P7	900	18.148	49.147	38.763	0.79	0.00	PATB 641
ATOM	643	C49	P7	900	-4.316	48.180	14.689	0.00	0.00	PATB 642
ATOM	644	C50	P7	900	24.945	52.037	50.625	0.64	0.00	PATB 643
ATOM	645	C51	P7	900	0.624	47.900	28.493	0.00	0.00	PATB 644
ATOM	646	C52	P7	900	6.550	54.339	26.459	0.57	0.00	PATB 645
ATOM	647	C53	P7	900	-7.877	25.353	53.075	0.71	0.00	PATB 646
ATOM	648	C54	P7	900	17.766	51.356	35.887	0.57	0.00	PATB 647
ATOM	649	C55	P7	900	15.648	30.541	61.876	0.50	0.00	PATB 648
ATOM	650	C56	P7	900	15.564	30.455	60.481	0.57	0.00	PATB 649
ATOM	651	C57	P7	900	0.701	29.647	29.591	1.00	0.00	PATB 650
ATOM	652	C58	P7	900	26.098	51.282	50.874	0.00	0.00	PATB 651
ATOM	653	C59	P7	900	-2.519	61.708	20.063	0.57	0.00	PATB 652

APPENDIX IV

ATOM	1	C1	P1	900	-20.175	98.008	52.430	0.00	50.00	PATB	0
ATOM	2	C2	P1	900	-20.307	99.115	52.633	0.00	49.12	PATB	1
ATOM	3	C3	P1	900	-19.364	98.645	52.128	0.00	45.61	PATB	2
ATOM	4	C4	P1	900	-26.846	108.132	45.266	0.00	44.74	PATB	3
ATOM	5	C5	P1	900	-19.348	98.369	53.501	0.50	41.23	PATB	4
ATOM	6	C6	P1	900	-21.146	97.691	53.553	0.00	41.23	PATB	5
ATOM	7	C7	P1	900	-20.676	97.128	52.790	0.00	41.23	PATB	6
ATOM	8	C8	P1	900	-26.049	108.825	44.950	0.00	40.35	PATB	7
ATOM	9	C9	P1	900	-19.429	100.284	53.163	0.00	38.60	PATB	8
ATOM	10	C10	P1	900	-25.940	108.546	46.102	0.00	37.72	PATB	9
ATOM	11	C11	P1	900	-26.582	109.869	45.225	0.00	37.72	PATB	10
ATOM	12	C12	P1	900	-18.497	99.607	52.549	0.00	35.96	PATB	11
ATOM	13	C13	P1	900	-23.400	78.907	42.203	0.00	34.21	PATB	12
ATOM	14	C14	P1	900	-27.919	102.737	3.634	0.00	34.21	PATB	13
ATOM	15	C15	P1	900	-26.633	110.057	46.309	0.00	34.21	PATB	14
ATOM	16	C16	P1	900	-22.664	78.441	44.310	0.00	33.33	PATB	15
ATOM	17	C17	P1	900	-23.452	78.072	43.283	0.00	33.33	PATB	16
ATOM	18	C18	P1	900	-24.094	98.067	32.996	0.00	32.46	PATB	17
ATOM	19	C19	P1	900	-17.819	98.655	52.667	0.00	32.46	PATB	18
ATOM	20	C20	P1	900	-23.184	75.571	45.603	0.00	31.58	PATB	19
ATOM	21	C21	P1	900	-24.400	91.880	-4.378	0.00	31.58	PATB	20
ATOM	22	C22	P1	900	-22.670	75.131	44.249	0.00	31.58	PATB	21
ATOM	23	C23	P1	900	-25.127	110.525	43.198	0.00	31.58	PATB	22
ATOM	24	C24	P1	900	-22.795	76.713	44.892	0.50	30.70	PATB	23
ATOM	25	C25	P1	900	-12.540	86.849	43.954	0.00	30.70	PATB	24
ATOM	26	C26	P1	900	-18.732	100.248	54.220	0.00	30.70	PATB	25
ATOM	27	C27	P1	900	-0.820	82.279	17.328	0.00	29.82	PATB	26
ATOM	28	C28	P1	900	-23.635	77.820	45.065	0.00	29.82	PATB	27
ATOM	29	C29	P1	900	-21.477	76.288	44.690	0.00	28.95	PATB	28
ATOM	30	C30	P1	900	-21.046	101.278	-8.385	0.00	28.07	PATB	29
ATOM	31	C31	P1	900	-12.894	95.180	37.321	0.00	28.07	PATB	30
ATOM	32	C32	P1	900	-25.515	111.440	46.197	0.00	28.07	PATB	31
ATOM	33	C33	P1	900	-21.102	75.494	43.698	0.00	28.07	PATB	32
ATOM	34	C34	P1	900	-22.594	77.121	42.718	0.50	28.07	PATB	33
ATOM	35	C35	P1	900	-22.938	77.717	41.499	0.00	28.07	PATB	34
ATOM	36	C36	P1	900	-14.074	85.528	44.522	0.00	28.07	PATB	35
ATOM	37	C37	P1	900	-6.310	74.810	9.368	0.00	28.07	PATB	36
ATOM	38	C38	P1	900	-18.425	98.920	53.901	0.50	28.07	PATB	37
ATOM	39	C39	P1	900	-25.993	111.739	43.059	0.00	28.07	PATB	38
ATOM	40	C40	P1	900	-13.700	86.124	45.273	0.00	28.07	PATB	39
ATOM	41	C41	P1	900	-22.275	76.272	43.540	0.50	28.07	PATB	40
ATOM	42	C42	P1	900	-34.023	101.980	54.157	0.00	28.07	PATB	41
ATOM	43	C43	P1	900	-28.695	101.796	3.721	0.00	28.07	PATB	42
ATOM	44	C44	P1	900	-21.410	82.870	35.628	0.00	27.19	PATB	43
ATOM	45	C45	P1	900	1.853	80.236	17.414	0.00	27.19	PATB	44
ATOM	46	C46	P1	900	-22.444	77.879	45.798	0.50	27.19	PATB	45
ATOM	47	C47	P1	900	-22.266	78.463	41.450	0.00	26.32	PATB	46
ATOM	48	C48	P1	900	-5.550	73.517	10.301	0.00	26.32	PATB	47
ATOM	49	C49	P1	900	-1.471	83.435	19.835	0.00	26.32	PATB	48
ATOM	50	C50	P1	900	-28.854	103.512	4.330	0.50	26.32	PATB	49
ATOM	51	C51	P1	900	-21.926	76.609	46.079	0.00	26.32	PATB	50
ATOM	52	C52	P1	900	0.142	82.357	19.401	0.50	26.32	PATB	51
ATOM	53	C53	P1	900	0.702	81.075	19.356	0.00	25.44	PATB	52
ATOM	54	C54	P1	900	-8.557	75.112	10.266	0.00	25.44	PATB	53
ATOM	55	C55	P1	900	-27.847	104.146	5.067	0.00	25.44	PATB	54
ATOM	56	C56	P1	900	-25.218	111.929	45.293	0.00	25.44	PATB	55
ATOM	57	C57	P1	900	-21.990	74.572	43.475	0.00	25.44	PATB	56
ATOM	58	C58	P1	900	-14.223	95.451	35.365	0.00	25.44	PATB	57
ATOM	59	C59	P1	900	-14.178	105.617	3.369	0.00	25.44	PATB	58
ATOM	60	C60	P1	900	-11.997	92.222	-10.115	0.00	25.44	PATB	59
ATOM	61	C61	P1	900	-21.751	76.734	41.670	0.00	25.44	PATB	60
ATOM	62	C62	P1	900	-13.700	83.995	44.833	0.00	24.56	PATB	61
ATOM	63	C63	P1	900	-12.341	104.493	5.752	0.00	24.56	PATB	62
ATOM	64	C64	P1	900	-25.334	98.132	32.657	0.00	24.56	PATB	63
ATOM	65	C65	P1	900	-22.140	80.803	36.265	0.00	24.56	PATB	64
ATOM	66	C66	P1	900	-12.302	88.428	44.807	0.00	23.68	PATB	65
ATOM	67	C67	P1	900	0.306	81.328	20.336	0.00	23.68	PATB	66

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ATOM	68	C68	P1	900	-17.270	99.513	53.377	0.00	23.68	PATB	67
ATOM	69	C69	P1	900	1.244	81.303	18.086	0.50	23.68	PATB	68
ATOM	70	C70	P1	900	-12.463	75.404	8.926	0.00	23.68	PATB	69
ATOM	71	C71	P1	900	-7.293	75.517	10.333	0.00	23.68	PATB	70
ATOM	72	C72	P1	900	-22.039	82.384	34.485	0.00	23.68	PATB	71
ATOM	73	C73	P1	900	-13.293	105.346	5.417	0.00	23.68	PATB	72
ATOM	74	C74	P1	900	-25.687	99.972	33.502	0.00	23.68	PATB	73
ATOM	75	C75	P1	900	-23.297	76.890	46.056	0.50	23.68	PATB	74
ATOM	76	C76	P1	900	-23.649	99.654	32.854	0.00	22.81	PATB	75
ATOM	77	C77	P1	900	-18.532	97.347	54.001	0.00	22.81	PATB	76
ATOM	78	C78	P1	900	-12.423	85.774	44.579	0.00	22.81	PATB	77
ATOM	79	C79	P1	900	-18.988	101.670	-7.317	0.00	22.81	PATB	78
ATOM	80	C80	P1	900	-11.736	104.151	4.577	0.00	22.81	PATB	79
ATOM	81	C81	P1	900	-0.011	83.413	20.628	0.00	22.81	PATB	80
ATOM	82	C82	P1	900	-8.300	74.283	9.167	0.50	22.81	PATB	81
ATOM	83	C83	P1	900	-5.430	72.323	3.514	0.00	21.93	PATB	82
ATOM	84	C84	P1	900	-22.543	75.898	41.032	0.00	21.93	PATB	83
ATOM	85	C85	P1	900	-7.289	79.938	42.189	0.00	21.93	PATB	84
ATOM	86	C86	P1	900	-33.227	78.214	37.830	0.00	21.93	PATB	85
ATOM	87	C87	P1	900	-28.789	103.924	2.993	0.00	21.93	PATB	86
ATOM	88	C88	P1	900	-12.507	98.990	-5.675	0.00	21.93	PATB	87
ATOM	89	C89	P1	900	-11.600	99.343	21.608	0.00	21.93	PATB	88
ATOM	90	C90	P1	900	-38.131	101.689	38.238	0.00	21.93	PATB	89
ATOM	91	C91	P1	900	-22.873	80.456	35.546	0.00	21.93	PATB	90
ATOM	92	C92	P1	900	1.362	83.804	19.391	0.50	21.05	PATB	91
ATOM	93	C93	P1	900	1.371	82.564	20.040	0.00	21.05	PATB	92
ATOM	94	C94	P1	900	-22.230	101.302	-8.306	0.00	21.05	PATB	93
ATOM	95	C95	P1	900	-21.332	81.872	35.646	0.00	21.05	PATB	94
ATOM	96	C96	P1	900	-13.015	94.546	36.418	0.00	20.18	PATB	95
ATOM	97	C97	P1	900	-0.600	83.346	18.744	0.58	20.18	PATB	96
ATOM	98	C98	P1	900	-39.276	100.598	36.650	0.00	20.18	PATB	97
ATOM	99	C99	P1	900	-40.738	98.891	34.871	0.00	20.18	PATB	98
ATOM	100	C1	P2	900	-20.222	102.400	-8.239	0.58	20.18	PATB	99
ATOM	101	C2	P2	900	-25.282	90.971	-4.510	0.00	20.18	PATB	100
ATOM	102	C3	P2	900	-29.025	102.897	5.804	0.00	20.18	PATB	101
ATOM	103	C4	P2	900	-13.576	84.196	46.199	0.00	20.18	PATB	102
ATOM	104	C5	P2	900	-14.414	94.975	34.019	0.00	20.18	PATB	103
ATOM	105	C6	P2	900	-6.019	81.202	20.754	0.00	20.18	PATB	104
ATOM	106	C7	P2	900	-26.059	92.605	-5.257	0.00	19.30	PATB	105
ATOM	107	C8	P2	900	-7.424	81.592	43.311	0.00	19.30	PATB	106
ATOM	108	C9	P2	900	-12.278	75.486	10.276	0.00	19.30	PATB	107
ATOM	109	C10	P2	900	-28.253	104.013	6.166	0.00	19.30	PATB	108
ATOM	110	C11	P2	900	-12.750	85.269	45.844	0.50	19.30	PATB	109
ATOM	111	C12	P2	900	-34.915	100.972	54.544	0.50	19.30	PATB	110
ATOM	112	C13	P2	900	1.243	82.185	18.698	0.50	19.30	PATB	111
ATOM	113	C14	P2	900	-25.222	77.236	46.667	0.00	19.30	PATB	112
ATOM	114	C15	P2	900	-29.563	102.478	4.582	0.50	19.30	PATB	113
ATOM	115	C16	P2	900	-24.251	76.245	46.852	0.58	19.30	PATB	114
ATOM	116	C17	P2	900	-40.417	99.421	36.643	0.00	19.30	PATB	115
ATOM	117	C18	P2	900	-22.239	75.125	41.870	0.00	19.30	PATB	116
ATOM	118	C19	P2	900	-4.844	68.641	34.302	0.00	19.30	PATB	117
ATOM	119	C20	P2	900	-11.809	82.835	46.132	0.00	18.42	PATB	118
ATOM	120	C21	P2	900	-0.433	84.363	19.691	0.50	18.42	PATB	119
ATOM	121	C22	P2	900	0.182	82.877	18.102	0.58	18.42	PATB	120
ATOM	122	C23	P2	900	-7.460	74.202	9.884	0.50	18.42	PATB	121
ATOM	123	C24	P2	900	-26.760	94.364	-5.709	0.00	18.42	PATB	122
ATOM	124	C25	P2	900	-7.549	104.530	15.681	0.00	18.42	PATB	123
ATOM	125	C26	P2	900	-12.282	98.700	-7.529	0.00	18.42	PATB	124
ATOM	126	C27	P2	900	-26.656	99.410	33.268	0.00	18.42	PATB	125
ATOM	127	C28	P2	900	-16.165	104.213	45.912	0.00	18.42	PATB	126
ATOM	128	C29	P2	900	-2.813	83.153	18.338	0.00	18.42	PATB	127
ATOM	129	C30	P2	900	-34.453	80.437	26.490	0.00	18.42	PATB	128
ATOM	130	C31	P2	900	-1.727	84.656	19.199	0.50	18.42	PATB	129
ATOM	131	C32	P2	900	-20.508	103.867	-4.916	0.00	18.42	PATB	130
ATOM	132	C33	P2	900	-7.054	74.136	8.546	0.00	18.42	PATB	131
ATOM	133	C34	P2	900	-13.747	106.911	3.686	0.58	17.54	PATB	132
ATOM	134	C35	P2	900	-11.414	85.745	45.048	0.00	17.54	PATB	133
ATOM	135	C36	P2	900	2.411	81.386	17.317	0.00	17.54	PATB	134
ATOM	136	C37	P2	900	-5.778	78.892	41.104	0.00	17.54	PATB	135
ATOM	137	C38	P2	900	-14.215	96.356	34.379	0.00	17.54	PATB	136

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ATOM	138	C39	P2	900	-10.682	103.851	4.583	0.00	17.54	PATB 137
ATOM	139	C40	P2	900	-11.408	105.025	6.065	0.00	17.54	PATB 138
ATOM	140	C41	P2	900	-25.253	112.611	44.400	0.00	17.54	PATB 139
ATOM	141	C42	P2	900	-11.206	85.980	20.194	0.00	17.54	PATB 140
ATOM	142	C43	P2	900	-11.898	87.052	45.181	0.50	17.54	PATB 141
ATOM	143	C44	P2	900	-37.388	101.800	36.308	0.00	17.54	PATB 142
ATOM	144	C45	P2	900	-21.871	80.751	34.925	0.00	17.54	PATB 143
ATOM	145	C46	P2	900	-6.710	81.271	19.942	0.00	17.54	PATB 144
ATOM	146	C47	P2	900	-13.008	74.720	9.821	0.00	16.67	PATB 145
ATOM	147	C48	P2	900	-11.994	79.303	17.890	0.00	16.67	PATB 146
ATOM	148	C49	P2	900	-5.336	77.655	40.320	0.00	16.67	PATB 147
ATOM	149	C50	P2	900	-4.097	70.652	3.426	0.00	16.67	PATB 148
ATOM	150	C51	P2	900	-12.734	92.746	-11.184	0.58	16.67	PATB 149
ATOM	151	C52	P2	900	-18.839	103.791	-4.585	0.00	16.67	PATB 150
ATOM	152	C53	P2	900	-21.797	107.606	57.924	0.00	16.67	PATB 151
ATOM	153	C54	P2	900	-15.076	106.360	1.856	0.00	16.67	PATB 152
ATOM	154	C55	P2	900	-11.512	101.131	21.922	0.00	16.67	PATB 153
ATOM	155	C56	P2	900	-21.392	75.949	42.503	0.00	16.67	PATB 154
ATOM	156	C57	P2	900	-38.104	101.166	35.104	0.00	16.67	PATB 155
ATOM	157	C58	P2	900	-37.685	102.313	37.447	0.00	16.67	PATB 156
ATOM	158	C59	P2	900	-12.201	91.454	-11.267	0.50	15.79	PATB 157
ATOM	159	C60	P2	900	-13.049	99.696	-6.251	0.00	15.79	PATB 158
ATOM	160	C61	P2	900	-9.573	74.566	8.659	0.00	15.79	PATB 159
ATOM	161	C62	P2	900	-23.347	100.667	32.695	0.00	15.79	PATB 160
ATOM	162	C63	P2	900	-18.335	105.882	45.260	0.00	15.79	PATB 161
ATOM	163	C64	P2	900	-34.833	102.090	55.382	0.00	15.79	PATB 162
ATOM	164	C65	P2	900	-33.255	76.868	38.926	0.00	15.79	PATB 163
ATOM	165	C66	P2	900	-10.539	98.684	22.206	0.00	15.79	PATB 164
ATOM	166	C67	P2	900	-26.059	112.617	42.577	0.00	15.79	PATB 165
ATOM	167	C68	P2	900	-13.772	106.489	2.351	0.50	15.79	PATB 166
ATOM	168	C69	P2	900	-8.866	83.779	20.813	0.00	15.79	PATB 167
ATOM	169	C70	P2	900	-11.474	74.617	9.528	0.50	15.79	PATB 168
ATOM	170	C71	P2	900	-5.328	81.990	20.362	0.00	15.79	PATB 169
ATOM	171	C72	P2	900	-23.942	77.304	47.228	0.58	15.79	PATB 170
ATOM	172	C73	P2	900	-21.586	102.488	-7.935	0.50	15.79	PATB 171
ATOM	173	C74	P2	900	-12.590	74.408	8.709	0.00	15.79	PATB 172
ATOM	174	C75	P2	900	-21.176	101.970	-9.169	0.00	15.79	PATB 173
ATOM	175	C76	P2	900	-19.367	102.919	-6.810	0.75	15.79	PATB 174
ATOM	176	C77	P2	900	-33.357	79.641	26.358	0.00	15.79	PATB 175
ATOM	177	C78	P2	900	-0.369	84.015	17.500	0.67	15.79	PATB 176
ATOM	178	C79	P2	900	-12.888	106.054	4.280	0.58	14.91	PATB 177
ATOM	179	C80	P2	900	-34.026	75.990	39.928	0.00	14.91	PATB 178
ATOM	180	C81	P2	900	-38.979	101.876	37.140	0.50	14.91	PATB 179
ATOM	181	C82	P2	900	-38.917	102.570	39.317	0.00	14.91	PATB 180
ATOM	182	C83	P2	900	-10.017	99.651	22.277	0.00	14.91	PATB 181
ATOM	183	C84	P2	900	-6.249	80.717	42.711	0.50	14.91	PATB 182
ATOM	184	C85	P2	900	2.832	70.228	8.541	0.00	14.91	PATB 183
ATOM	185	C86	P2	900	-28.848	104.617	4.209	0.50	14.91	PATB 184
ATOM	186	C87	P2	900	-21.083	77.718	46.088	0.00	14.91	PATB 185
ATOM	187	C88	P2	900	-15.108	103.285	45.250	0.00	14.04	PATB 186
ATOM	188	C89	P2	900	-10.510	98.098	43.775	0.00	14.04	PATB 187
ATOM	189	C90	P2	900	-29.390	100.670	3.374	0.00	14.04	PATB 188
ATOM	190	C91	P2	900	-3.029	85.108	19.444	0.00	14.04	PATB 189
ATOM	191	C92	P2	900	-20.028	104.743	-4.382	0.00	14.04	PATB 190
ATOM	192	C93	P2	900	-35.322	102.504	54.137	0.50	14.04	PATB 191
ATOM	193	C94	P2	900	-6.452	82.299	22.119	0.00	14.04	PATB 192
ATOM	194	C95	P2	900	-14.147	106.038	1.080	0.00	14.04	PATB 193
ATOM	195	C96	P2	900	-15.911	107.217	2.171	0.00	14.04	PATB 194
ATOM	196	C97	P2	900	-16.652	88.678	32.474	0.00	14.04	PATB 195
ATOM	197	C98	P2	900	-12.404	83.416	46.801	0.00	14.04	PATB 196
ATOM	198	C99	P2	900	-15.013	107.478	3.497	0.00	14.04	PATB 197
ATOM	199	C1	P3	900	-8.233	86.155	21.517	0.00	14.04	PATB 198
ATOM	200	C2	P3	900	-23.768	98.395	31.692	0.00	14.04	PATB 199
ATOM	201	C3	P3	900	-10.102	102.215	22.609	0.00	13.16	PATB 200
ATOM	202	C4	P3	900	-9.684	101.043	22.803	0.00	13.16	PATB 201
ATOM	203	C5	P3	900	-12.501	106.350	5.593	0.00	13.16	PATB 202
ATOM	204	C6	P3	900	-11.301	87.779	43.586	0.00	13.16	PATB 203
ATOM	205	C7	P3	900	-5.343	70.391	2.844	0.58	13.16	PATB 204
ATOM	206	C8	P3	900	-10.286	79.373	19.813	0.00	13.16	PATB 205
ATOM	207	C9	P3	900	-4.609	68.666	35.742	0.00	13.16	PATB 206

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ATOM	208	C10	P3	900	-24.939	111.640	42.063	0.00	13.16	PATB 207
ATOM	209	C11	P3	900	-18.245	106.173	47.065	0.00	13.16	PATB 208
ATOM	210	C12	P3	900	-11.682	94.884	37.663	0.00	13.16	PATB 209
ATOM	211	C13	P3	900	-11.598	84.303	46.078	0.58	13.16	PATB 210
ATOM	212	C14	P3	900	2.288	82.755	19.434	0.00	13.16	PATB 211
ATOM	213	C15	P3	900	-40.296	100.451	35.703	0.50	13.16	PATB 212
ATOM	214	C16	P3	900	-11.413	84.948	20.563	0.00	13.16	PATB 213
ATOM	215	C17	P3	900	-11.944	95.996	36.931	0.00	13.16	PATB 214
ATOM	216	C18	P3	900	-13.577	78.900	17.074	0.00	13.16	PATB 215
ATOM	217	C19	P3	900	0.582	84.204	18.299	0.67	13.16	PATB 216
ATOM	218	C20	P3	900	-31.460	109.464	58.512	0.00	13.16	PATB 217
ATOM	219	C21	P3	900	-11.693	105.534	4.792	0.50	13.16	PATB 218
ATOM	220	C22	P3	900	-30.027	101.662	4.129	0.50	13.16	PATB 219
ATOM	221	C23	P3	900	-32.638	76.990	36.782	0.00	13.16	PATB 220
ATOM	222	C24	P3	900	-13.801	92.903	-12.076	0.75	13.16	PATB 221
ATOM	223	C25	P3	900	-1.024	85.163	20.677	0.00	13.16	PATB 222
ATOM	224	C26	P3	900	-26.007	91.602	-6.006	0.00	13.16	PATB 223
ATOM	225	C27	P3	900	-23.227	77.961	46.956	0.58	13.16	PATB 224
ATOM	226	C28	P3	900	-7.260	81.464	21.540	0.00	13.16	PATB 225
ATOM	227	C29	P3	900	-11.934	90.177	-10.759	0.00	12.28	PATB 226
ATOM	228	C30	P3	900	-10.601	98.598	45.036	0.00	12.28	PATB 227
ATOM	229	C31	P3	900	-1.656	83.880	18.036	0.58	12.28	PATB 228
ATOM	230	C32	P3	900	-29.242	104.132	5.182	0.50	12.28	PATB 229
ATOM	231	C33	P3	900	-16.431	78.980	-2.148	0.00	12.28	PATB 230
ATOM	232	C34	P3	900	-27.885	99.536	32.785	0.00	12.28	PATB 231
ATOM	233	C35	P3	900	-22.668	76.835	47.572	0.00	12.28	PATB 232
ATOM	234	C36	P3	900	-29.916	103.237	3.460	0.58	12.28	PATB 233
ATOM	235	C37	P3	900	-8.135	82.607	21.040	0.50	12.28	PATB 234
ATOM	236	C38	P3	900	-21.580	103.742	-6.287	0.00	12.28	PATB 235
ATOM	237	C39	P3	900	-40.216	99.691	34.530	0.00	12.28	PATB 236
ATOM	238	C40	P3	900	-39.027	100.649	34.363	0.00	12.28	PATB 237
ATOM	239	C41	P3	900	-13.912	87.079	34.280	0.00	12.28	PATB 238
ATOM	240	C42	P3	900	-21.763	108.126	56.987	0.00	12.28	PATB 239
ATOM	241	C43	P3	900	-6.853	73.004	10.279	0.67	12.28	PATB 240
ATOM	242	C44	P3	900	-7.823	105.740	13.601	0.00	12.28	PATB 241
ATOM	243	C45	P3	900	-42.943	98.993	35.388	0.58	12.28	PATB 242
ATOM	244	C46	P3	900	-6.609	82.468	20.661	0.50	12.28	PATB 243
ATOM	245	C47	P3	900	-16.509	105.494	46.361	0.58	12.28	PATB 244
ATOM	246	C48	P3	900	-10.875	83.538	47.001	0.00	12.28	PATB 245
ATOM	247	C49	P3	900	-26.205	90.668	-4.804	0.00	12.28	PATB 246
ATOM	248	C50	P3	900	-13.048	78.479	18.300	0.50	12.28	PATB 247
ATOM	249	C51	P3	900	-11.266	100.046	22.772	0.50	12.28	PATB 248
ATOM	250	C52	P3	900	-24.643	111.819	43.420	0.50	12.28	PATB 249
ATOM	251	C53	P3	900	0.484	69.377	7.844	0.00	11.40	PATB 250
ATOM	252	C54	P3	900	-13.171	79.914	31.812	0.00	11.40	PATB 251
ATOM	253	C55	P3	900	-26.080	99.132	32.022	0.50	11.40	PATB 252
ATOM	254	C56	P3	900	-13.131	100.387	-7.413	0.00	11.40	PATB 253
ATOM	255	C57	P3	900	-16.712	80.625	-3.209	0.00	11.40	PATB 254
ATOM	256	C58	P3	900	-23.859	110.784	54.907	0.00	11.40	PATB 255
ATOM	257	C59	P3	900	-12.071	100.540	-6.347	0.00	11.40	PATB 256
ATOM	258	C60	P3	900	-8.546	81.305	20.732	0.00	11.40	PATB 257
ATOM	259	C61	P3	900	-19.123	103.084	-5.441	0.00	11.40	PATB 258
ATOM	260	C62	P3	900	-24.965	99.462	32.417	0.50	11.40	PATB 259
ATOM	261	C63	P3	900	-9.950	88.978	37.937	0.00	11.40	PATB 260
ATOM	262	C64	P3	900	-35.618	78.241	26.626	0.00	11.40	PATB 261
ATOM	263	C65	P3	900	3.345	70.757	9.755	0.00	11.40	PATB 262
ATOM	264	C66	P3	900	-0.592	85.010	18.460	0.58	11.40	PATB 263
ATOM	265	C67	P3	900	-6.895	102.967	15.000	0.00	11.40	PATB 264
ATOM	266	C68	P3	900	-26.371	100.454	32.380	0.58	11.40	PATB 265
ATOM	267	C69	P3	900	-32.726	75.876	39.563	0.00	11.40	PATB 266
ATOM	268	C70	P3	900	-11.825	86.216	46.301	0.58	11.40	PATB 267
ATOM	269	C71	P3	900	-5.336	71.220	3.972	0.00	11.40	PATB 268
ATOM	270	C72	P3	900	-11.950	95.954	35.532	0.58	11.40	PATB 269
ATOM	271	C73	P3	900	-13.160	77.853	17.053	0.00	10.53	PATB 270
ATOM	272	C74	P3	900	2.421	82.577	18.052	0.58	10.53	PATB 271
ATOM	273	C75	P3	900	-25.270	101.282	33.181	0.00	10.53	PATB 272
ATOM	274	C76	P3	900	1.409	83.544	18.016	0.67	10.53	PATB 273
ATOM	275	C77	P3	900	-16.265	104.514	47.331	0.00	10.53	PATB 274
ATOM	276	C78	P3	900	-21.861	108.916	55.589	0.00	10.53	PATB 275
ATOM	277	C79	P3	900	-12.567	84.797	46.961	0.50	10.53	PATB 276

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ATOM	278	C80	P3	900	-9.696	84.555	21.631	0.67	10.53	PATB 277
ATOM	279	C81	P3	900	-20.660	103.262	-7.225	0.67	10.53	PATB 278
ATOM	280	C82	P3	900	-0.118	84.950	21.214	0.00	10.53	PATB 279
ATOM	281	C83	P3	900	-6.323	71.380	2.992	0.50	10.53	PATB 280
ATOM	282	C84	P3	900	-26.365	97.934	31.357	0.00	10.53	PATB 281
ATOM	283	C85	P3	900	-8.537	73.363	10.195	0.67	10.53	PATB 282
ATOM	284	C86	P3	900	-3.633	69.505	1.836	0.00	10.53	PATB 283
ATOM	285	C87	P3	900	-4.787	68.656	37.006	0.00	10.53	PATB 284
ATOM	286	C88	P3	900	-6.438	81.582	43.795	0.00	10.53	PATB 285
ATOM	287	C89	P3	900	-17.958	82.292	-4.245	0.00	10.53	PATB 286
ATOM	288	C90	P3	900	-17.544	81.390	-3.844	0.00	10.53	PATB 287
ATOM	289	C91	P3	900	-9.928	82.132	20.961	0.00	10.53	PATB 288
ATOM	290	C92	P3	900	-33.828	76.993	36.890	0.00	10.53	PATB 289
ATOM	291	C93	P3	900	-22.755	108.529	59.528	0.00	10.53	PATB 290
ATOM	292	C94	P3	900	-6.952	104.552	16.534	0.00	10.53	PATB 291
ATOM	293	C95	P3	900	-11.531	88.240	46.042	0.00	10.53	PATB 292
ATOM	294	C96	P3	900	-16.142	81.382	-4.199	0.00	10.53	PATB 293
ATOM	295	C97	P3	900	-13.265	92.075	48.840	0.00	10.53	PATB 294
ATOM	296	C98	P3	900	-10.516	85.659	21.369	0.75	9.65	PATB 295
ATOM	297	C99	P3	900	-38.309	103.383	38.143	0.00	9.65	PATB 296
ATOM	298	C1	P4	900	-13.026	95.682	34.678	0.50	9.65	PATB 297
ATOM	299	C2	P4	900	-6.235	104.133	15.407	0.50	9.65	PATB 298
ATOM	300	C3	P4	900	-33.511	78.297	26.338	0.00	9.65	PATB 299
ATOM	301	C4	P4	900	-28.336	105.884	4.515	0.00	9.65	PATB 300
ATOM	302	C5	P4	900	-7.649	83.891	20.768	0.00	9.65	PATB 301
ATOM	303	C6	P4	900	2.153	83.829	20.546	0.00	9.65	PATB 302
ATOM	304	C7	P4	900	-12.553	106.590	3.031	0.67	9.65	PATB 303
ATOM	305	C8	P4	900	-2.569	84.784	17.480	0.00	9.65	PATB 304
ATOM	306	C9	P4	900	-10.853	105.003	3.806	0.58	9.65	PATB 305
ATOM	307	C10	P4	900	-15.201	103.635	46.823	0.00	9.65	PATB 306
ATOM	308	C11	P4	900	-33.104	79.701	25.196	0.00	9.65	PATB 307
ATOM	309	C12	P4	900	-6.799	105.211	14.715	0.58	9.65	PATB 308
ATOM	310	C13	P4	900	-39.434	101.369	35.493	0.50	9.65	PATB 309
ATOM	311	C14	P4	900	-10.040	83.424	21.487	0.67	9.65	PATB 310
ATOM	312	C15	P4	900	-30.245	103.672	4.320	0.58	9.65	PATB 311
ATOM	313	C16	P4	900	-6.058	102.961	16.165	0.00	9.65	PATB 312
ATOM	314	C17	P4	900	-10.398	104.978	6.084	0.00	9.65	PATB 313
ATOM	315	C18	P4	900	-9.178	103.746	5.045	0.00	9.65	PATB 314
ATOM	316	C19	P4	900	-25.582	88.110	18.665	0.00	8.77	PATB 315
ATOM	317	C20	P4	900	-41.886	99.686	34.787	0.50	8.77	PATB 316
ATOM	318	C21	P4	900	-11.646	94.801	36.266	0.50	8.77	PATB 317
ATOM	319	C22	P4	900	-7.068	105.818	15.947	0.50	8.77	PATB 318
ATOM	320	C23	P4	900	-9.930	84.275	45.833	0.00	8.77	PATB 319
ATOM	321	C24	P4	900	-22.158	109.332	58.549	0.50	8.77	PATB 320
ATOM	322	C25	P4	900	-38.779	101.807	36.150	0.50	8.77	PATB 321
ATOM	323	C26	P4	900	-7.672	73.032	9.144	0.58	8.77	PATB 322
ATOM	324	C27	P4	900	-9.366	104.255	5.893	0.00	8.77	PATB 323
ATOM	325	C28	P4	900	-10.361	80.848	20.395	0.00	8.77	PATB 324
ATOM	326	C29	P4	900	-5.317	76.535	41.345	0.00	8.77	PATB 325
ATOM	327	C30	P4	900	-36.504	101.946	53.636	0.67	8.77	PATB 326
ATOM	328	C31	P4	900	-36.081	101.640	54.935	0.58	8.77	PATB 327
ATOM	329	C32	P4	900	-11.526	92.529	-11.858	0.00	8.77	PATB 328
ATOM	330	C33	P4	900	-20.799	107.834	58.221	0.00	8.77	PATB 329
ATOM	331	C34	P4	900	-42.106	98.339	34.477	0.00	8.77	PATB 330
ATOM	332	C35	P4	900	-10.995	101.320	23.210	0.50	7.89	PATB 331
ATOM	333	C36	P4	900	-4.992	69.774	1.637	0.67	7.89	PATB 332
ATOM	334	C37	P4	900	-11.578	99.775	24.110	0.67	7.89	PATB 333
ATOM	335	C38	P4	900	-10.328	90.747	-12.100	0.00	7.89	PATB 334
ATOM	336	C39	P4	900	-9.147	85.582	22.408	0.75	7.89	PATB 335
ATOM	337	C40	P4	900	-13.117	97.068	34.507	0.00	7.89	PATB 336
ATOM	338	C41	P4	900	-7.778	73.406	7.523	0.00	7.89	PATB 337
ATOM	339	C42	P4	900	-9.675	96.639	44.664	0.00	7.89	PATB 338
ATOM	340	C43	P4	900	-6.585	103.959	14.062	0.58	7.89	PATB 339
ATOM	341	C44	P4	900	-4.155	67.778	36.010	0.00	7.89	PATB 340
ATOM	342	C45	P4	900	-34.528	78.062	26.547	0.00	7.89	PATB 341
ATOM	343	C46	P4	900	-7.432	83.078	23.356	0.00	7.89	PATB 342
ATOM	344	C47	P4	900	-10.571	103.027	23.648	0.67	7.89	PATB 343
ATOM	345	C48	P4	900	-6.259	72.031	4.230	0.00	7.89	PATB 344
ATOM	346	C49	P4	900	-22.470	102.482	-9.020	0.58	7.89	PATB 345
ATOM	347	C50	P4	900	-16.341	97.493	23.608	0.00	7.89	PATB 346

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ATOM	348	C51	P4	900	-9.022	88.480	39.981	0.00	7.89	PATB 347
ATOM	349	C52	P4	900	-12.568	87.365	34.549	0.50	7.89	PATB 348
ATOM	350	C53	P4	900	-21.537	77.106	47.452	0.00	7.89	PATB 349
ATOM	351	C54	P4	900	1.804	69.103	8.223	0.67	7.89	PATB 350
ATOM	352	C55	P4	900	-17.095	89.806	31.480	0.00	7.02	PATB 351
ATOM	353	C56	P4	900	-20.785	104.827	-5.897	0.58	7.02	PATB 352
ATOM	354	C57	P4	900	-7.537	83.170	21.962	0.50	7.02	PATB 353
ATOM	355	C58	P4	900	-23.708	99.774	31.460	0.58	7.02	PATB 354
ATOM	356	C59	P4	900	-17.252	106.557	45.835	0.75	7.02	PATB 355
ATOM	357	C60	P4	900	-11.070	84.329	21.771	0.75	7.02	PATB 356
ATOM	358	C61	P4	900	-11.732	106.045	3.489	0.67	7.02	PATB 357
ATOM	359	C62	P4	900	-12.611	73.583	7.929	0.00	7.02	PATB 358
ATOM	360	C63	P4	900	-4.167	67.229	35.055	0.00	7.02	PATB 359
ATOM	361	C64	P4	900	-8.577	87.287	38.852	0.00	7.02	PATB 360
ATOM	362	C65	P4	900	-15.051	97.745	23.948	0.00	7.02	PATB 361
ATOM	363	C66	P4	900	-10.214	104.188	22.951	0.00	7.02	PATB 362
ATOM	364	C67	P4	900	-20.875	108.444	55.444	0.00	7.02	PATB 363
ATOM	365	C68	P4	900	-41.564	100.017	36.108	0.58	7.02	PATB 364
ATOM	366	C69	P4	900	-27.157	93.053	-6.001	0.50	7.02	PATB 365
ATOM	367	C70	P4	900	-9.914	101.827	23.941	0.58	7.02	PATB 366
ATOM	368	C71	P4	900	-33.146	76.116	37.751	0.50	7.02	PATB 367
ATOM	369	C72	P4	900	-10.301	99.356	44.097	0.00	6.14	PATB 368
ATOM	370	C73	P4	900	-13.752	108.027	3.238	0.58	6.14	PATB 369
ATOM	371	C74	P4	900	-19.465	104.423	-5.666	0.50	6.14	PATB 370
ATOM	372	C75	P4	900	-31.907	110.189	57.630	0.00	6.14	PATB 371
ATOM	373	C76	P4	900	-12.071	79.163	19.280	0.58	6.14	PATB 372
ATOM	374	C77	P4	900	-15.803	89.268	31.530	0.50	6.14	PATB 373
ATOM	375	C78	P4	900	-6.466	70.395	2.008	0.75	6.14	PATB 374
ATOM	376	C79	P4	900	-1.436	86.005	18.966	0.00	6.14	PATB 375
ATOM	377	C80	P4	900	-10.777	73.463	9.904	0.75	6.14	PATB 376
ATOM	378	C81	P4	900	-23.265	109.584	59.368	0.00	6.14	PATB 377
ATOM	379	C82	P4	900	-21.638	108.828	59.748	0.00	6.14	PATB 378
ATOM	380	C83	P4	900	-11.809	92.480	49.124	0.00	6.14	PATB 379
ATOM	381	C84	P4	900	-21.934	103.844	-7.962	0.75	6.14	PATB 380
ATOM	382	C85	P4	900	-8.932	73.370	8.315	0.58	6.14	PATB 381
ATOM	383	C86	P4	900	3.595	69.112	8.176	0.67	6.14	PATB 382
ATOM	384	C87	P4	900	-12.068	94.693	34.935	0.67	6.14	PATB 383
ATOM	385	C88	P4	900	-15.598	99.190	24.055	0.00	6.14	PATB 384
ATOM	386	C89	P4	900	-8.101	107.569	15.292	0.75	6.14	PATB 385
ATOM	387	C90	P4	900	-10.709	85.377	46.208	0.67	6.14	PATB 386
ATOM	388	C91	P4	900	-9.628	97.930	42.940	0.00	6.14	PATB 387
ATOM	389	C92	P4	900	-9.410	73.559	9.618	0.67	6.14	PATB 388
ATOM	390	C93	P4	900	-11.845	85.495	21.777	0.83	6.14	PATB 389
ATOM	391	C94	P4	900	-24.656	100.425	32.260	0.50	6.14	PATB 390
ATOM	392	C95	P4	900	-30.444	101.829	5.455	0.00	6.14	PATB 391
ATOM	393	C96	P4	900	-32.447	78.702	25.485	0.00	6.14	PATB 392
ATOM	394	C97	P4	900	-23.374	110.191	55.675	0.00	6.14	PATB 393
ATOM	395	C98	P4	900	-9.943	97.347	45.968	0.00	6.14	PATB 394
ATOM	396	C99	P4	900	-37.554	101.950	34.084	0.67	6.14	PATB 395
ATOM	397	C1	P5	900	-30.932	110.185	59.590	0.50	6.14	PATB 396
ATOM	398	C2	P5	900	-10.302	100.239	23.769	0.58	6.14	PATB 397
ATOM	399	C3	P5	900	-14.265	97.402	24.906	0.00	6.14	PATB 398
ATOM	400	C4	P5	900	0.259	85.260	17.376	0.75	5.26	PATB 399
ATOM	401	C5	P5	900	-13.227	88.590	34.391	0.00	5.26	PATB 400
ATOM	402	C6	P5	900	-10.557	87.439	45.072	0.00	5.26	PATB 401
ATOM	403	C7	P5	900	-14.768	107.270	0.837	0.58	5.26	PATB 402
ATOM	404	C8	P5	900	-12.440	77.926	19.823	0.75	5.26	PATB 403
ATOM	405	C9	P5	900	-41.509	99.125	33.561	0.00	5.26	PATB 404
ATOM	406	C10	P5	900	-11.420	73.518	8.662	0.67	5.26	PATB 405
ATOM	407	C11	P5	900	-18.560	103.556	-7.760	0.83	5.26	PATB 406
ATOM	408	C12	P5	900	-11.466	80.006	20.220	0.50	5.26	PATB 407
ATOM	409	C13	P5	900	-11.339	78.617	20.342	0.67	5.26	PATB 408
ATOM	410	C14	P5	900	-27.250	99.742	31.554	0.67	5.26	PATB 409
ATOM	411	C15	P5	900	-15.843	79.793	-3.925	0.67	5.26	PATB 410
ATOM	412	C16	P5	900	-12.269	100.778	23.419	0.75	5.26	PATB 411
ATOM	413	C17	P5	900	-1.490	85.666	17.609	0.67	5.26	PATB 412
ATOM	414	C18	P5	900	-12.727	92.069	-12.410	0.67	5.26	PATB 413
ATOM	415	C19	P5	900	-38.513	103.094	36.632	0.58	5.26	PATB 414
ATOM	416	C20	P5	900	-9.931	84.552	47.205	0.67	5.26	PATB 415
ATOM	417	C21	P5	900	-8.311	84.763	21.641	0.50	5.26	PATB 416

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ATOM	418	C22	P5	900	-11.697	90.456	-12.110	0.58	5.26	PATB 417
ATOM	419	C23	P5	900	-40.355	101.083	34.455	0.58	5.26	PATB 418
ATOM	420	C24	P5	900	-14.396	81.622	31.561	0.00	5.26	PATB 419
ATOM	421	C25	P5	900	-35.633	103.110	55.360	0.00	5.26	PATB 420
ATOM	422	C26	P5	900	-27.807	94.134	-6.608	0.58	5.26	PATB 421
ATOM	423	C27	P5	900	-43.009	98.228	33.745	0.00	5.26	PATB 422
ATOM	424	C28	P5	900	-22.534	109.021	60.402	0.00	5.26	PATB 423
ATOM	425	C29	P5	900	-14.572	107.626	2.177	0.50	5.26	PATB 424
ATOM	426	C30	P5	900	-6.452	82.252	42.727	0.00	5.26	PATB 425
ATOM	427	C31	P5	900	-14.390	85.246	47.775	0.00	5.26	PATB 426
ATOM	428	C32	P5	900	1.367	69.512	10.777	0.00	5.26	PATB 427
ATOM	429	C33	P5	900	-0.091	69.192	8.818	0.00	5.26	PATB 428
ATOM	430	C34	P5	900	-14.289	98.829	24.398	0.50	5.26	PATB 429
ATOM	431	C35	P5	900	-21.027	103.336	-8.899	0.67	4.39	PATB 430
ATOM	432	C36	P5	900	4.208	70.204	8.801	0.50	4.39	PATB 431
ATOM	433	C37	P5	900	-33.722	75.584	38.624	0.50	4.39	PATB 432
ATOM	434	C38	P5	900	-6.257	102.844	13.283	0.00	4.39	PATB 433
ATOM	435	C39	P5	900	2.520	83.860	18.605	0.67	4.39	PATB 434
ATOM	436	C40	P5	900	-12.988	91.080	48.844	0.00	4.39	PATB 435
ATOM	437	C41	P5	900	-26.849	87.843	18.134	0.58	4.39	PATB 436
ATOM	438	C42	P5	900	-32.317	110.017	59.471	0.58	4.39	PATB 437
ATOM	439	C43	P5	900	-14.602	100.111	23.929	0.00	4.39	PATB 438
ATOM	440	C44	P5	900	-31.425	110.839	58.772	0.50	4.39	PATB 439
ATOM	441	C45	P5	900	-8.848	83.597	22.201	0.58	4.39	PATB 440
ATOM	442	C46	P5	900	-8.769	88.653	38.615	0.50	4.39	PATB 441
ATOM	443	C47	P5	900	-11.799	106.902	4.515	0.67	4.39	PATB 442
ATOM	444	C48	P5	900	-29.694	110.839	59.575	0.00	4.39	PATB 443
ATOM	445	C49	P5	900	-5.400	67.361	34.406	0.50	4.39	PATB 444
ATOM	446	C50	P5	900	-34.348	78.536	25.242	0.50	4.39	PATB 445
ATOM	447	C51	P5	900	-9.399	98.011	44.622	0.50	4.39	PATB 446
ATOM	448	C52	P5	900	-34.349	76.143	37.035	0.00	4.39	PATB 447
ATOM	449	C53	P5	900	-27.843	92.042	-5.317	0.00	4.39	PATB 448
ATOM	450	C54	P5	900	-20.931	104.517	-7.255	0.67	4.39	PATB 449
ATOM	451	C55	P5	900	-17.130	81.631	-5.160	0.50	4.39	PATB 450
ATOM	452	C56	P5	900	-11.560	97.292	35.996	0.00	4.39	PATB 451
ATOM	453	C57	P5	900	-23.908	112.817	44.071	0.67	4.39	PATB 452
ATOM	454	C58	P5	900	-12.619	106.356	1.569	0.75	4.39	PATB 453
ATOM	455	C59	P5	900	-7.688	106.955	16.480	0.00	4.39	PATB 454
ATOM	456	C60	P5	900	-11.279	84.778	47.510	0.58	4.39	PATB 455
ATOM	457	C61	P5	900	-7.466	106.441	14.759	0.67	4.39	PATB 456
ATOM	458	C62	P5	900	-15.605	104.568	48.189	0.00	4.39	PATB 457
ATOM	459	C63	P5	900	-4.684	66.486	36.123	0.50	4.39	PATB 458
ATOM	460	C64	P5	900	-12.814	80.184	19.886	0.00	4.39	PATB 459
ATOM	461	C65	P5	900	-4.951	66.096	34.805	0.58	3.51	PATB 460
ATOM	462	C66	P5	900	-10.181	104.173	24.351	0.83	3.51	PATB 461
ATOM	463	C67	P5	900	-15.586	90.646	31.413	0.00	3.51	PATB 462
ATOM	464	C68	P5	900	-11.655	102.233	24.040	0.75	3.51	PATB 463
ATOM	465	C69	P5	900	-16.982	80.318	-4.548	0.50	3.51	PATB 464
ATOM	466	C70	P5	900	-22.071	105.170	-6.773	0.00	3.51	PATB 465
ATOM	467	C71	P5	900	-14.048	95.933	32.773	0.00	3.51	PATB 466
ATOM	468	C72	P5	900	-42.721	99.545	34.121	0.50	3.51	PATB 467
ATOM	469	C73	P5	900	-15.210	105.009	46.556	0.50	3.51	PATB 468
ATOM	470	C74	P5	900	-10.462	99.173	23.515	0.58	3.51	PATB 469
ATOM	471	C75	P5	900	-5.644	103.287	14.461	0.58	3.51	PATB 470
ATOM	472	C76	P5	900	-13.589	91.454	50.052	0.50	3.51	PATB 471
ATOM	473	C77	P5	900	-36.651	102.820	54.443	0.67	3.51	PATB 472
ATOM	474	C78	P5	900	-8.384	88.851	40.867	0.00	3.51	PATB 473
ATOM	475	C79	P5	900	-34.903	75.147	39.235	0.58	3.51	PATB 474
ATOM	476	C80	P5	900	-27.190	90.891	-5.773	0.50	3.51	PATB 475
ATOM	477	C81	P5	900	-15.134	80.557	31.896	0.00	3.51	PATB 476
ATOM	478	C82	P5	900	-30.322	103.280	5.442	0.58	3.51	PATB 477
ATOM	479	C83	P5	900	-22.464	110.770	54.781	0.83	3.51	PATB 478
ATOM	480	C84	P5	900	-8.748	95.719	44.831	0.00	3.51	PATB 479
ATOM	481	C85	P5	900	-13.350	78.725	19.645	0.75	3.51	PATB 480
ATOM	482	C86	P5	900	-5.013	77.863	41.667	0.50	3.51	PATB 481
ATOM	483	C87	P5	900	-24.912	113.169	43.162	0.58	3.51	PATB 482
ATOM	484	C88	P5	900	-15.530	105.701	45.382	0.92	3.51	PATB 483
ATOM	485	C89	P5	900	-20.870	109.216	58.013	0.58	3.51	PATB 484
ATOM	486	C90	P5	900	-4.006	67.476	36.960	0.00	3.51	PATB 485
ATOM	487	C91	P5	900	-14.448	79.357	31.675	0.50	3.51	PATB 486

ATOM	488	C92	P5	900	-4.949	103.626	15.628	0.67	3.51	PATB 487
ATOM	489	C93	P5	900	-30.468	111.837	58.553	0.00	3.51	PATB 488
ATOM	490	C94	P5	900	-11.047	86.950	46.288	0.58	2.63	PATB 489
ATOM	491	C95	P5	900	-12.705	107.738	4.121	0.67	2.63	PATB 490
ATOM	492	C96	P5	900	-5.828	105.084	13.715	0.67	2.63	PATB 491
ATOM	493	C97	P5	900	2.548	83.693	17.215	0.75	2.63	PATB 492
ATOM	494	C98	P5	900	1.567	85.090	17.846	0.00	2.63	PATB 493
ATOM	495	C99	P5	900	-30.944	102.669	4.452	0.58	2.63	PATB 494
ATOM	496	C1	P6	900	-10.471	85.233	22.702	0.83	2.63	PATB 495
ATOM	497	C2	P6	900	-29.675	104.998	3.145	0.58	2.63	PATB 496
ATOM	498	C3	P6	900	-30.828	102.227	3.129	0.67	2.63	PATB 497
ATOM	499	C4	P6	900	-2.018	85.867	20.118	0.00	2.63	PATB 498
ATOM	500	C5	P6	900	-7.558	71.197	2.359	0.83	2.63	PATB 499
ATOM	501	C6	P6	900	-15.717	97.424	24.894	0.00	2.63	PATB 500
ATOM	502	C7	P6	900	-10.751	96.171	36.220	0.67	2.63	PATB 501
ATOM	503	C8	P6	900	-4.879	80.636	42.986	0.58	2.63	PATB 502
ATOM	504	C9	P6	900	-11.506	77.256	20.621	0.83	2.63	PATB 503
ATOM	505	C10	P6	900	-31.286	109.217	60.538	0.00	2.63	PATB 504
ATOM	506	C11	P6	900	-6.755	104.693	12.741	0.00	2.63	PATB 505
ATOM	507	C12	P6	900	-8.074	87.815	40.234	0.00	2.63	PATB 506
ATOM	508	C13	P6	900	-30.784	100.667	3.498	0.58	2.63	PATB 507
ATOM	509	C14	P6	900	-16.876	88.474	31.107	0.58	2.63	PATB 508
ATOM	510	C15	P6	900	-9.860	104.964	4.792	0.50	2.63	PATB 509
ATOM	511	C16	P6	900	-12.867	83.254	21.098	0.00	2.63	PATB 510
ATOM	512	C17	P6	900	-11.409	104.148	23.679	0.75	2.63	PATB 511
ATOM	513	C18	P6	900	-7.921	72.106	10.164	0.75	2.63	PATB 512
ATOM	514	C19	P6	900	-12.306	73.511	9.746	0.58	2.63	PATB 513
ATOM	515	C20	P6	900	-16.903	106.551	47.191	0.67	2.63	PATB 514
ATOM	516	C21	P6	900	-12.973	86.604	33.445	0.00	2.63	PATB 515
ATOM	517	C22	P6	900	1.148	69.090	9.460	0.50	2.63	PATB 516
ATOM	518	C23	P6	900	-19.853	103.750	-8.260	0.75	1.75	PATB 517
ATOM	519	C24	P6	900	-13.312	80.950	31.215	0.00	1.75	PATB 518
ATOM	520	C25	P6	900	-21.830	110.003	57.365	0.67	1.75	PATB 519
ATOM	521	C26	P6	900	-12.451	84.251	21.989	0.92	1.75	PATB 520
ATOM	522	C27	P6	900	-9.294	72.404	11.005	0.00	1.75	PATB 521
ATOM	523	C28	P6	900	-8.205	84.534	23.018	1.00	1.75	PATB 522
ATOM	524	C29	P6	900	2.707	69.900	10.659	0.67	1.75	PATB 523
ATOM	525	C30	P6	900	-15.920	106.756	46.215	0.83	1.75	PATB 524
ATOM	526	C31	P6	900	-27.553	91.895	-6.679	0.58	1.75	PATB 525
ATOM	527	C32	P6	900	-7.510	88.180	39.005	0.58	1.75	PATB 526
ATOM	528	C33	P6	900	-16.295	77.140	-2.762	0.00	1.75	PATB 527
ATOM	529	C34	P6	900	-16.411	89.514	30.293	0.67	1.75	PATB 528
ATOM	530	C35	P6	900	-17.335	78.077	-2.721	0.50	1.75	PATB 529
ATOM	531	C36	P6	900	-5.461	81.042	44.193	0.00	1.75	PATB 530
ATOM	532	C37	P6	900	-0.071	69.215	10.137	0.00	1.75	PATB 531
ATOM	533	C38	P6	900	-8.673	96.879	45.612	0.50	1.75	PATB 532
ATOM	534	C39	P6	900	-8.002	87.889	37.727	0.67	1.75	PATB 533
ATOM	535	C40	P6	900	-24.982	113.009	41.773	0.67	1.75	PATB 534
ATOM	536	C41	P6	900	-5.283	69.692	0.270	0.83	1.75	PATB 535
ATOM	537	C42	P6	900	-14.981	98.421	25.545	0.58	1.75	PATB 536
ATOM	538	C43	P6	900	-19.970	108.202	54.751	0.00	1.75	PATB 537
ATOM	539	C44	P6	900	-16.574	108.001	0.761	0.00	1.75	PATB 538
ATOM	540	C45	P6	900	-41.434	101.182	35.342	0.67	1.75	PATB 539
ATOM	541	C46	P6	900	-19.597	104.153	-7.033	0.75	1.75	PATB 540
ATOM	542	C47	P6	900	-19.875	106.255	-5.182	0.00	1.75	PATB 541
ATOM	543	C48	P6	900	-14.428	104.087	45.706	0.00	1.75	PATB 542
ATOM	544	C49	P6	900	-20.955	109.208	56.615	0.50	1.75	PATB 543
ATOM	545	C50	P6	900	-12.311	84.056	48.121	0.00	1.75	PATB 544
ATOM	546	C51	P6	900	-25.115	98.419	31.191	0.00	1.75	PATB 545
ATOM	547	C52	P6	900	-10.184	72.861	8.682	0.75	1.75	PATB 546
ATOM	548	C53	P6	900	-5.902	66.998	35.662	0.00	0.88	PATB 547
ATOM	549	C54	P6	900	-16.139	78.386	-3.382	0.58	0.88	PATB 548
ATOM	550	C55	P6	900	-12.792	107.489	2.373	0.67	0.88	PATB 549
ATOM	551	C56	P6	900	-13.650	108.716	4.453	0.00	0.88	PATB 550
ATOM	552	C57	P6	900	-13.055	85.239	48.196	0.58	0.88	PATB 551
ATOM	553	C58	P6	900	-28.857	106.043	2.699	0.00	0.88	PATB 552
ATOM	554	C59	P6	900	-9.471	98.661	45.860	0.58	0.88	PATB 553
ATOM	555	C60	P6	900	-16.045	80.802	-5.469	0.58	0.88	PATB 554
ATOM	556	C61	P6	900	-33.979	77.226	25.568	0.58	0.88	PATB 555
ATOM	557	C62	P6	900	-26.703	88.794	19.151	0.50	0.88	PATB 556

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ATOM	558	C63	P6	900	-11.088	83.048	22.337	0.83	0.88	PATB 557
ATOM	559	C64	P6	900	-33.825	79.604	24.503	0.00	0.88	PATB 558
ATOM	560	C65	P6	900	-42.412	99.009	32.760	0.00	0.88	PATB 559
ATOM	561	C66	P6	900	-15.776	105.806	47.559	0.58	0.88	PATB 560
ATOM	562	C67	P6	900	3.645	83.028	18.561	0.83	0.88	PATB 561
ATOM	563	C68	P6	900	-37.972	102.548	35.279	0.58	0.88	PATB 562
ATOM	564	C69	P6	900	-5.053	104.779	14.840	0.75	0.88	PATB 563
ATOM	565	C70	P6	900	-17.024	79.272	-3.382	0.58	0.88	PATB 564
ATOM	566	C71	P6	900	-30.127	105.041	4.589	0.67	0.88	PATB 565
ATOM	567	C72	P6	900	3.344	69.376	9.528	0.58	0.88	PATB 566
ATOM	568	C73	P6	900	-11.404	106.564	2.231	0.83	0.88	PATB 567
ATOM	569	C74	P6	900	-5.751	105.345	15.913	0.58	0.88	PATB 568
ATOM	570	C75	P6	900	-40.171	102.399	34.895	0.67	0.88	PATB 569
ATOM	571	C76	P6	900	-22.757	110.597	58.546	0.67	0.88	PATB 570
ATOM	572	C77	P6	900	-6.362	70.757	4.549	0.00	0.88	PATB 571
ATOM	573	C78	P6	900	-13.586	107.312	1.234	0.58	0.88	PATB 572
ATOM	574	C79	P6	900	-22.013	110.246	55.998	0.75	0.88	PATB 573
ATOM	575	C80	P6	900	-11.385	84.265	23.134	0.92	0.88	PATB 574
ATOM	576	C81	P6	900	-41.178	100.453	33.854	0.58	0.88	PATB 575
ATOM	577	C82	P6	900	-10.489	106.175	4.479	0.67	0.88	PATB 576
ATOM	578	C83	P6	900	-10.632	105.313	23.673	0.92	0.88	PATB 577
ATOM	579	C84	P6	900	2.696	68.076	7.894	0.83	0.88	PATB 578
ATOM	580	C85	P6	900	-5.960	69.193	2.466	0.75	0.88	PATB 579
ATOM	581	C86	P6	900	-7.463	71.090	3.751	0.75	0.88	PATB 580
ATOM	582	C87	P6	900	-11.986	85.976	47.671	0.67	0.88	PATB 581
ATOM	583	C88	P6	900	-12.588	91.733	50.016	0.50	0.00	PATB 582
ATOM	584	C89	P6	900	-35.299	77.034	25.992	0.67	0.00	PATB 583
ATOM	585	C90	P6	900	-8.725	88.992	37.258	0.75	0.00	PATB 584
ATOM	586	C91	P6	900	-19.999	105.482	-6.853	0.83	0.00	PATB 585
ATOM	587	C92	P6	900	-10.648	102.483	24.935	0.75	0.00	PATB 586
ATOM	588	C93	P6	900	-13.495	87.882	33.213	0.50	0.00	PATB 587
ATOM	589	C94	P6	900	-5.432	81.839	42.529	0.00	0.00	PATB 588
ATOM	590	C95	P6	900	-27.548	89.054	18.066	0.00	0.00	PATB 589
ATOM	591	C96	P6	900	-13.544	77.447	19.106	0.83	0.00	PATB 590
ATOM	592	C97	P6	900	3.297	83.672	19.755	0.75	0.00	PATB 591
ATOM	593	C98	P6	900	-21.328	109.952	54.813	0.92	0.00	PATB 592
ATOM	594	C99	P6	900	-23.909	112.507	42.445	0.67	0.00	PATB 593
ATOM	595	C1	P7	900	-27.190	89.967	18.561	0.00	0.00	PATB 594
ATOM	596	C2	P7	900	-13.152	95.076	33.422	0.58	0.00	PATB 595
ATOM	597	C3	P7	900	-10.953	101.159	24.600	0.67	0.00	PATB 596
ATOM	598	C4	P7	900	2.028	68.055	9.124	0.75	0.00	PATB 597
ATOM	599	C5	P7	900	-6.739	107.355	15.532	0.83	0.00	PATB 598
ATOM	600	C6	P7	900	-10.801	95.235	35.180	0.75	0.00	PATB 599
ATOM	601	C7	P7	900	-39.303	102.925	35.489	0.67	0.00	PATB 600
ATOM	602	C8	P7	900	-12.419	79.068	20.633	0.67	0.00	PATB 601
ATOM	603	C9	P7	900	-19.979	108.440	57.262	0.67	0.00	PATB 602
ATOM	604	C10	P7	900	-9.444	103.031	24.478	0.83	0.00	PATB 603
ATOM	605	C11	P7	900	-5.298	105.563	17.220	0.00	0.00	PATB 604
ATOM	606	C12	P7	900	-6.601	70.058	3.360	0.67	0.00	PATB 605
ATOM	607	C13	P7	900	-25.532	101.421	31.813	0.67	0.00	PATB 606
ATOM	608	C14	P7	900	-14.608	103.775	47.938	0.00	0.00	PATB 607
ATOM	609	C15	P7	900	-10.076	83.894	22.806	0.75	0.00	PATB 608
ATOM	610	C16	P7	900	-28.513	92.826	-6.265	0.67	0.00	PATB 609
ATOM	611	C17	P7	900	-9.441	84.873	23.579	0.92	0.00	PATB 610
ATOM	612	C18	P7	900	-22.028	110.170	59.663	0.58	0.00	PATB 611
ATOM	613	C19	P7	900	-3.924	78.059	40.276	0.00	0.00	PATB 612
ATOM	614	C20	P7	900	-38.919	102.045	34.380	0.58	0.00	PATB 613
ATOM	615	C21	P7	900	-22.970	110.683	56.921	0.83	0.00	PATB 614
ATOM	616	C22	P7	900	-34.770	75.080	37.843	0.67	0.00	PATB 615
ATOM	617	C23	P7	900	-11.212	91.561	-12.819	0.67	0.00	PATB 616
ATOM	618	C24	P7	900	-13.796	106.789	-0.048	0.67	0.00	PATB 617
ATOM	619	C25	P7	900	0.795	68.164	8.471	0.58	0.00	PATB 618

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